August 2023
Marine Drive Property

ANCHOR QEA

Phase 2 Environmental Assessment Report

Prepared for ABC Recycling

August 2023
Marine Drive Property

Phase 2 Environmental Assessment Report

Prepared for
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ABBREVIATIONS

bgs	below ground surface
COPC	constituent of potential concern
cPAH	carcinogenic polycyclic aromatic hydrocarbon
CSM	conceptual site model
ESA	environmental site assessment
mg/kg	milligrams per kilogram
MTCA	Washington Model Toxics Control Act
NWTPH-Dx	diesel range hydrocarbons and residual range hydrocarbons
NWTPH-Gx	gasoline range hydrocarbons
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
SAP	sampling and analysis plan
TCLP	toxicity characteristic leaching procedure
TEQ	toxic equivalents quotient
TPH	total petroleum hydrocarbons
µg/L	micrograms per liter

1 Introduction

This Phase 2 Environmental Assessment Report describes the sampling and results from the Phase 2 Environmental Site Assessment (ESA) sampling. Sampling was conducted in response to recommendations for further studies identified as part of the Phase 1 ESA for the portion of the Lehigh Hanson-owned property that ABC Recycling is considering purchasing (the Property). The conclusions and recommendations presented in this report represent Anchor QEA's best professional judgment regarding environmental conditions at the subject Property as of November 2020. These conclusions and recommendations are based on Anchor QEA's review of the information presented in this report and on state and federal regulations and policies as they exist at the time that this report was prepared.

1.1 Statement of Objectives

The Phase 2 ESA was conducted to determine whether historical uses of the Property or nearby sites have contaminated the Property and will indicate if any contaminants present in soil have migrated into groundwater. This environmental assessment will provide information relevant to identifying, defining, and evaluating property conditions associated with metals, petroleum products, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and dioxins/furans that may pose a risk to human health or the environment, or risk of bodily injury to persons on the Property and thereby give rise to potential liability. This understanding will support ABC Recycling's due diligence process to aid in determining whether to purchase the Property from Lehigh Hanson.

1.2 Background

The Property is located at 741 Marine Drive in Bellingham, Washington, 98225 (Figure 1; Whatcom County parcel number 380223124302). The Property, encompassing a total area of approximately 18 acres, is unpaved and unimproved except for a gravel lot with temporary equipment, containers, and debris in the central portion of the Property. The remaining portion of the Property for purchase is undeveloped forest. The elevation of the Property ranges from approximately 85 to 100 feet in elevation above sea level. The Property boundary is bordered by Marine Drive to the northeast and by an active railroad spur along the southwestern border. The northwestern boundary generally follows the tree line, while the southeastern boundary is delineated by asphalt or mowed grass associated with the adjacent property at 749 Marine Drive. Lehigh Hanson is the current owner of the Property. The Property is currently occupied by Northwest Recycling and Bellingham Marine. Current site activities include equipment, container, and material storage.

The central portion of the Property that is now the yard was cleared between 1968 and 1971 and established as a materials storage area for the cement plant. From 2006 to present, the yard has remained active with equipment and materials stored on site.

The cement plant adjacent to the Property began operation as Columbia Northwest in 1913. The plant was purchased and sold by multiple different cement companies before the Tilbury Cement Company (later Lehigh Hanson) bought the plant in 1987.

In March 2020, Lehigh Hanson conducted surface soil sampling in the developed yard portion of the Property. Samples were analyzed for total petroleum hydrocarbons (TPHs) and metals. All samples were detect for oil-range TPHs, mercury, arsenic, barium, cadmium, chromium, and lead. Chromatogram results indicated all samples likely contained lube oil and some samples likely contained weathered gasoline and diesel.

Anchor QEA recently conducted a Phase 1 ESA in October 2020 and identified the history of material storage and historical stockpiling of limestone on the Property (Anchor QEA 2020a). Geoprobe borings to groundwater and the collection of soil and groundwater samples as well as test pit soil sampling were recommended in the Phase 1 ESA to provide additional information regarding soil and groundwater quality and to refine information regarding site conditions. It is recognized that there may be potential sources of contamination remaining from historical uses on the Property and potentially from adjacent sites that are currently monitored by the Washington State Department of Ecology and the Environmental Protection Agency; however, no specific sources of on-site contamination were identified through the Phase 1 ESA process.

1.3 Preliminary Conceptual Site Model

A preliminary conceptual site model (CSM) has been developed based on the results of historical research from the Phase 1 ESA (Anchor QEA 2020a) to provide a framework for Phase 2 testing such that a general understanding of site conditions and the presence of contamination is validated through the sampling process. A discussion of the chemicals and media of concern, the fate and transport characteristics of released contaminants, and the potential exposure pathways to human and ecological receptors is included in this section. The CSM will serve as the basis for developing recommendations to inform potential concerns associated with levels of contamination that may influence whether ABC Recycling chooses to purchase the Property.

As described in the Phase 1 ESA (Anchor QEA 2020a), the Property has historically been used to stockpile materials, including limestone, although a comprehensive list of materials stockpiled on site is not available. The central yard portion of the site is currently leased to Northwest Recycling and Bellingham Marine and is used as storage space for a variety of containers, old equipment, and materials. The equipment and materials present on site do not appear to be frequently used or to contain any hazardous materials, are generally in good order, and are often stored on top of steel mats. Shipping and large bin type containers do appear to be moved routinely and a number of them were observed coming and going during both the Phase 1 site reconnaissance and Phase 2 sampling.

Soil, groundwater, and air are media within the Property that could potentially be affected by the constituents of potential concern (COPCs) identified at the site. The historical and current activities identified in the Phase 1 ESA prompted selection of metals, PAHs, TPHs, PCBs, and dioxin/furan congeners as COPCs for soil, groundwater, and air on the Property as a potential exposure risk to human receptors. Soil contamination could result from residual stockpile material; leaching of metals from storage of large metal containers; or surficial spills of gasoline, diesel, heavy oil, or hydraulic fluid from maintenance, storage, or operation of heavy machinery. Soil contamination could also possibly be present from previous undocumented landfilling activities. Groundwater contamination could result from contaminants migrating down to the groundwater from discrete contaminated soil on the Property, or via contaminants migrating from nearby contaminated sites. Air contamination could result from COPCs bound to dust particulates generated when equipment is moving materials or during ground-disturbing activities on the Property.

2 Summary of Work Performed

2.1 Field Activities

Field sampling for the Phase 2 ESA was conducted from October 20, 2020, to October 27, 2020, in accordance with the project Sampling and Analysis Plan (SAP; Anchor QEA 2020b). Figure 1 shows the actual locations of test pit samples and geoprobe boring locations. Up to three soil samples were collected from each of the boring locations and up to two soil samples were collected from each of the test pit locations. While 15 test pit samples were originally planned, an additional two were sampled (TP-16 and TP-17) based on field observations.

2.1.1 Test Pits

Anchor QEA, with support from subcontractor Anderson Environmental Contracting, collected samples from TP-4 through TP-12 and TP-16 via excavator. Anchor QEA collected samples from TP-1 through TP-3, TP-13 through TP-15, and TP-17 via hand auger, as access was not able to be cleared for the excavator to enter the wooded portions of the site. Test pit sampling details are summarized in Table 1. Test pits were used for observation of soil conditions, and for collection of surficial and subsurface soil samples. Sample intervals were collected following the procedures in the SAP (Anchor QEA 2020b) and were based on visual observations of the soils and through discussions with ABC Recycling and the project team. Sample material from the selected sample interval(s) was characterized before placement in sample jars. Each test pit was filled in, compacted with the excavator bucket, and surface graded by the excavator to the extent practicable following sampling. Test pit logs are included in Appendix A and sample photographs are included in Appendix B.

2.1.2 Soil Borings

Anchor QEA, with Anderson Environmental Contracting, advanced and collected soil borings via geoprobe at all six proposed locations (Figure 1). Due to dense surface conditions encountered in the yard area during test pits, a larger geoprobe rig than originally anticipated was used. Soil boring sampling details are summarized in Table 1. Soil borings were used for observation of subsurface soil conditions, and for collection of soil samples. Sample intervals were collected following the procedures in the SAP (Anchor QEA 2020b) based on field observations. Sample material from the selected interval(s) was characterized before placement in sample jars. Boring cuttings were characterized, contained in a 55-gallon drum on site, and will be disposed of at an appropriate disposal facility. Soil boring logs are included in Appendix A and sample photographs are included in Appendix B.

2.1.3 Groundwater

Groundwater samples were collected from temporary wells installed following the collection of soil samples from the soil borings. Groundwater sampling details are summarized in Table 2. Prior to groundwater sampling, the depth to water (below ground surface [bgs]) was measured at each location using an electronic depth-to-water indicator and recorded. Groundwater was purged with a peristaltic pump equipped with dedicated polyethylene tubing until the water quality parameters (pH, specific conductivity, dissolved oxygen, and temperature) stabilized. Once field-measured water quality parameters stabilized, groundwater was then sampled with the peristaltic pump near the bottom of the well screen interval using a low-flow sampling rate (less than 0.5 liter per minute).

Groundwater sampling was attempted at all six geoprobe locations; however, sufficient water for sampling was only found at two locations: GP-3 and GP-6 (Figure 1). Groundwater sample collection logs are included in Appendix A.

2.2 Laboratory Analysis

Following review of field observations, select samples were chosen for analysis through discussions with ABC Recycling regarding the number and type of samples collected, along with the rationale for how the sample fit with ABC Recycling's development goals. All soil samples selected for analysis were analyzed for metals, total solids, PAHs, and TPHs including gasoline, diesel, and residual range hydrocarbons (NWTPH-Gx and NWTPH-Dx). Three soil samples were selected for additional PCBs, dioxin/furan, and toxicity characteristic leaching procedure (TCLP) metals analysis. All groundwater samples were analyzed for dissolved metals, PAHs, and TPHs including NWTPH-Gx and NWTPH-Dx.

Discrete soil samples were collected from each test pit and soil boring at the sample intervals listed in Table 1. Sample containers were kept on ice for transport to the analytical laboratory. All laboratory analyses with the exception of dioxin/furan analyses, were performed at Onsite Environmental Inc. in Redmond, Washington. Dioxin/furan analyses were performed at Vista Analytical Laboratory in El Dorado Hills, California.

A summary of groundwater testing at each monitoring well is provided in Table 2. Sample containers were kept on ice for transport to the analytical laboratory. Laboratory analyses, except as noted, were performed at Onsite Environmental Inc. in Redmond, Washington.

Per the SAP, one field duplicate sample was collected for every 20 samples (Anchor QEA 2020b). A laboratory error during analysis resulted in only one field duplicate being analyzed for the 25 soil samples triggered for analysis, instead of the intended two duplicates. This error is not anticipated to affect the data quality because one field duplicate was analyzed and the standard laboratory quality control samples provide precision measurements. Additional details on sample analysis, validation, and the associated laboratory reports are provided in Appendices C and D.

3 Results

Results of the investigation are summarized in the following subsections. Soil and groundwater sampling logs are included in Appendix A. Data validation reports are included in Appendix C. Laboratory reports are included in Appendix D.

3.1 Physical Features

The samples collected from the wooded area on the northern side of the Property were generally composed of moist, fine-grained soils, with the exception of TP-3 (Figure 1). Unique soil characteristics identified at TP-3 are detailed below.

- TP-3 was selected to document conditions in a mound of fill in the woods noted during the September 30 site walk. The mound was composed of fine, limestone-like material. Debris were present on the mound and within the surrounding area.

The majority of samples collected from the yard were composed of dry, compacted gravel material that makes up the surface backfill of the yard. Native material was encountered in the yard between 4.5 and 5 feet bgs. Samples with unique soil characteristics are detailed below.

- TP-4 is along the northeastern edge of the yard and is the only location in the yard area to have native material at surface through to the depth of the bottom of the test pit (4 feet bgs). Material in this test pit contained brown grey fine-grained soil at the surface and contained more clayey soil with trace organics (wood pieces) towards the bottom of the test pit. Material from the surficial layer (0 to 0.5 feet bgs) was sampled and analyzed.
- TP-5 is located near the northwestern corner of the yard and was chosen for sampling based on observations of creosote-treated debris and creosote odor noted during the September 30 site walk. Surficial material from TP-5 (0 to 0.5 feet bgs) was sampled and analyzed.
- TP-6 is located near TP-4 on the northeastern side of the yard. This test pit was unique in that a slight metallic sheen was noted in the darkly colored fine-grained soil in the top 0 to 0.5 feet. Anthropogenic debris (e.g., hose, tarp, and fabric) was also observed compacted within the material along the test pit sidewall. The unique surficial layer was sampled and analyzed.
- TP-7 is located on the northwestern side of the yard. Native material was encountered at 4.5 feet and the 4.5- to 5-foot interval was sampled and submitted for analysis.
- TP-16 is a location added to the sampling scheme based on field observations. Surficial material was wet, and dark brown in color with coarse-grained soil, as opposed to the fine-grained soil found in surficial samples elsewhere around the yard. Native material was also encountered at this test pit starting at 5 feet bgs. The unique surficial layer and native layer were sampled and the native layer was analyzed.

Samples collected from the wooded area on the southern side of the Property typically consisted of dry to moist fine-grained soil underneath a surficial layer of leaves and organic matter. No test pits from this portion of the Property had significant variations, and there were no test pits with unique materials or debris observed.

Additional notes regarding the lithology of sampled intervals can be found in Table 1. Test pit and soil boring field logs are included in Appendix A and sample photographs are included in Appendix B.

3.2 Soil Samples

Soil samples were collected from 17 test pit and six soil boring locations (Figure 1). Soil samples were collected from the locations and intervals shown in Table 1. Twenty-six soil samples from 21 stations, including two field duplicates, were submitted for analytical testing as shown in Table 1.

Soil samples were screened against the following Washington Model Toxics Control Act (MTCA) criteria and included in Table 3. MTCA cleanup regulation (Chapter 173-340 Washington Administrative Code) provides soil cleanup levels based on the reasonable maximum exposure expected to occur under both current and future site use conditions. MTCA specifies two types of land use: unrestricted land use and industrial land use. For unrestricted land use, soil cleanup levels are based on the reasonable maximum exposure expected to occur under residential land use conditions, which are determined based on a child exposure scenario. No restrictions on future use of the land are required when soil concentrations are below the unrestricted cleanup levels.

Soil cleanup levels for unrestricted land use can be determined using Method A or Method B, as described below:

- **Method A Unrestricted:** These criteria are based on the most stringent of the unrestricted and industrial land uses, and the most stringent of the applicable state and federal laws. The goal of these criteria values is to have no significant adverse effects for the protection and propagation of terrestrial ecological receptors (plants and animals). These are the most conservative criteria and are used as the first screening step for evaluating if a site has any potential contamination.
- **Method B Unrestricted, Direct Contact:** These criteria are based on similar inputs as Method A, but standard Method B protective values are additionally calculated for hazardous substances for which health-based concentrations have not been established, based on the direct contact pathway (i.e., ingestion and dermal absorption). For the purposes of this report, these values should only be considered for those contaminants where a Method A value does not exist.
- **Method B Unrestricted, Protection of Groundwater:** These criteria are calculated to be protective of the highest beneficial use of groundwater, namely drinking water. The

calculation considers the soil-to-groundwater leaching pathway and depends on the mobility of contaminants. The value included in Table 3 is the more stringent of the non-carcinogenic and carcinogenic values. These standard criteria are highly conservative and should be evaluated in conjunction with the empirical site groundwater data, which can be used, together with MTCA groundwater cleanup levels, to demonstrate protection of human health.

Industrial soil cleanup levels in MTCA should only be used at sites that meet the definition of an industrial property under MTCA (Washington Administrative Code 173-340-200), as this property does. These criteria are based on the reasonable maximum exposure expected to occur under industrial land use conditions, which are determined based on an adult worker exposure scenario. Restrictions on future use of the land (e.g., covenants) are required when soil concentrations are above the unrestricted land use criteria, but below the industrial land use criteria. Either Method A or Method C can be used to determine soil cleanup levels for industrial land use, if required, as described below:

- **Method A Industrial:** These criteria are largely equivalent to the Method A Unrestricted values because they are based on the protection of groundwater. The contaminants that have less stringent cleanup levels (e.g., lead) are based on protection of human health under the adult worker scenario as opposed to the child exposure scenario.
- **Method C Industrial:** These criteria are similar to the Method B Unrestricted values but are calculated using a less stringent target cancer risk and less stringent default exposure assumptions. Additionally, Method C values that are protective of the environment only need to be protective of wildlife (e.g., deer), not plants or soil biota. To qualify for use of Method C cleanup levels, the site must include appropriate institutional controls to limit exposure to residual hazardous substances (e.g., a covenant restricting future property use to industrial uses).

Leachable metals in soil (TCLP samples) were additionally screened against toxicity characteristic thresholds for hazardous waste (Table 4). Documentation of the field sampling is provided in Appendix A. Sample photographs are provided in Appendix B. Data validation and laboratory reports are included in Appendix C and Appendix D.

Results for all stations are summarized below. Soil testing results are provided in Tables 3 and 4.

- **Metals:** Metals were detected in all samples, and all samples were above at least one of the MTCA screening levels for at least one analyte. Antimony results exceed MTCA Method B for direct contact at the surface for TP-5, TP-8, and TP-12, as well as in subsurface soils at TP-3 and TP-7. Additionally, surface samples from TP-4 and TP-9 exceed MTCA Method B soil criteria for protection of groundwater. Arsenic results are above MTCA Method B direct contact and protection of groundwater criteria for all soil samples. Arsenic results are above

MTCA Method A (unrestricted and industrial) criteria in surface samples at TP-8 and TP-12, as well as in the subsurface sample at TP-7. Arsenic results are above the MTCA Method C industrial criterion in surface samples at TP-4 and TP-9, as well as in the subsurface sample at TP-3. Arsenic results range from 3.6 to 160 milligrams per kilogram (mg/kg), averaging 25.8 mg/kg. Cadmium was detected in a majority of the samples, and was above Method A (unrestricted and industrial) criteria in the surface at TP-4 and in the subsurface at TP-3 and TP-7. Cadmium results are above MTCA Method B protection of groundwater criteria in the surface at TP-5, TP-6, TP-8, and TP-12, and in the subsurface at GP-4 (7.8 to 8.7 feet bgs), TP-16, and TP-17. Results range from 0.064 to 79 mg/kg, averaging 3.65 mg/kg. Lead was detected in all samples, and results exceed the MTCA Method A industrial criterion for TP-3. Chromium, copper, nickel, mercury, and zinc were detected in all samples, and below all screening criteria. Beryllium was detected but below screening criteria in all samples with the exception of TP-8 and TP-12 where it was not detected. Silver was detected in five samples, and was below screening criteria for all five. Selenium and thallium were non-detect for all samples with the exception of TP-3. Selenium was detected above the MTCA Method B protection of groundwater criterion and thallium was detected above MTCA Method B direct contact criterion.

- **TCLP Metals:** TCLP metals were analyzed at GP-1 (5.7 to 9.7 feet bgs), TP-5, TP-7, and TP-17 (Table 4). All samples were non-detect for TCLP metals with the exception of barium, which was detected in all four samples. Barium concentrations ranged from 450 to 1,500 micrograms per liter (µg/L), averaging 720 µg/L, but were well below screening values indicating that no hazardous waste material was encountered.
- **PAHs:** In the soil boring samples, PAHs were only detected in GP-2 (25 to 27 feet bgs), and GP-4 (7.8 to 8.7 feet bgs). A range of PAHs were detected in all test pit samples, with the exception of TP-2, TP-14, and TP-15. Of the locations with detected results, only three locations have results that exceed MTCA screening criteria. Benzo(a)pyrene is above the MTCA Method A Unrestricted criterion at TP-5 and TP-6, and is above the MTCA Method B direct contact criterion at TP-9. Total carcinogenic polycyclic aromatic hydrocarbon (cPAH) toxic equivalents quotient (TEQ) is detected above the MTCA Method B direct contact criterion at TP-5, TP-6, and TP-9. Total naphthalene is also above the MTCA Method A (unrestricted and industrial) criteria at TP-6. All samples with results above MTCA screening criteria are surficial samples from 0 to 0.5 feet bgs.
- **PCB:** Select samples were submitted for PCB Aroclor analysis. Locations submitted for PCB analysis include GP-1 (5.7 to 9.7 feet bgs), TP-5, TP-6, and TP-7 (Table 1). PCB Aroclors were only detected in the TP-5 sample, which is below all screening criteria for Aroclor 1260 and total PCB Aroclors.
- **NWTPH-Dx:** Diesel and residual range hydrocarbons were detected only in test pit samples. Diesel range hydrocarbons were detected in surficial soils at TP-4, TP-5, and TP-6, and range

from 34 to 71 mg/kg. Residual range hydrocarbons were detected in near-surficial (0.5 to 1.5 feet bgs) soil at TP-1, and in surficial soil (0 to 0.5 feet bgs) at TP-4, TP-5, TP-6, and TP-9. Concentrations for residual range hydrocarbons range from 95 to 410 mg/kg and all are below available screening criteria.

- **NWTPH-Gx:** Gasoline range hydrocarbons were only detected at TP-6. The result was 19 mg/kg, below the 30 mg/kg MTCA Method A (unrestricted and industrial) screening criteria (Table 3).
- **Dioxins/furans:** Select samples were submitted for dioxin/furan analysis. Locations include GP-1 (5.7 to 9.7 feet bgs), TP-5, and TP-6 (Table 1). Dioxin/furans were detected at all tested locations. At TP-5 and TP-6 results were detected for all 26 analytes, while results were detected for seven analytes from GP-1. At TP-5, both Total HxCDD and Total Dioxin/Furan TEQ exceed MTCA Method B direct contact criteria (Table 3).

3.2.1 Deviation from Sampling Plan

For a few test pits, sampled intervals were collected from the bucket of the excavator when samplers were unable to collect sufficient material from the side walls of the test pit due to depth or the consolidated nature of the material. To protect the sample the excavator bucket was cleaned with alconox and rinsed with deionized water before collecting and sampling the material from the bucket.

3.3 Groundwater Samples

Groundwater sampling was attempted at each of the six soil boring locations (Figure 1). A total of three groundwater samples, including one field duplicate, were collected from two locations and submitted for analytical testing as summarized in Table 2. Groundwater samples were screened against the following MTCA criteria and are shown in Table 5.

- **MTCA Method A:** These default criteria are used to establish cleanup levels for potable groundwater at routine sites and sites with relatively few hazardous substances. They are based on the most stringent of the applicable state and federal laws and must be at least as stringent as the surface water cleanup level established. These are the most conservative criteria and should be used as the first screening step for evaluating if a site has any potential contamination.
- **MTCA Method B:** These criteria may be used to establish cleanup levels for potable groundwater at any site. These criteria are based on similar inputs as the Method A, but standard Method B protective values are additionally calculated for hazardous substances for which health-based concentrations have not been established. For the purposes of this report, these values should only be used for those contaminants where a Method A value does not exist.

Documentation of the field sampling is provided in Appendix A. Data validation and laboratory reports are included in Appendix C and Appendix D.

Results for both locations are summarized below. Groundwater testing results are provided in Table 5.

- **Dissolved metals:** Dissolved metals for both samples and the duplicate are below both MTCA Method A and Method B criteria available for groundwater. All samples were detect for arsenic, nickel, selenium, and zinc. Arsenic concentrations range from 0.56 to 0.76 µg/L, well below the Method A Unrestricted criterion of 5 µg/L and the Method B direct contact criterion of 4.8 µg/L. Nickel concentrations range from 13 to 17 µg/L. Selenium ranges from 1.4 to 5.6 µg/L. Zinc concentrations range from 3 to 7 µg/L.
- **PAHs:** PAHs were only above detection limits for the duplicate sample at GP-3-GW. Benzo(b)fluoranthene and total cPAH TEQ were detected in the sample. No MTCA criteria are available for benzo(b)fluoranthene, and the total cPAH TEQ result is below both MTCA Method A and Method B criteria for groundwater.
- **NWTPH-Dx:** Diesel range hydrocarbons and residual range hydrocarbons were detected in the sample and duplicate sample at GP-3-GW. Diesel range hydrocarbons range from 0.11 to 0.12 mg/L, and are below the MTCA Method A Unrestricted criterion (0.5 mg/L). Residual range hydrocarbons range from 0.27 to 0.29 mg/L and are also below the MTCA Method A criterion (0.5 mg/L). No Method B criteria are available for either of these analytes.
- **NWTPH-Gx:** Gasoline range hydrocarbons were not detected in either of the two groundwater samples or the duplicate.

3.3.1 Deviations from Sampling Plan

No deviations occurred during groundwater sampling. Details regarding groundwater sampling are included in Appendix A.

3.4 Potential Exposure Pathways

For a COPC to present a risk to human health or the environment, there must be a pathway from the COPC to the receptor. The COPC-to-receptor pathways judged to be present at the site are discussed by medium in this section.

3.4.1 Soil

Direct ingestion of or dermal contact with soil containing metals, PAHs, TPHs, PCBs, or dioxins/furans is considered a potential exposure pathway. The results indicate exceedances of various screening criteria for both metals and PAHs. As surface soils contain contamination and the Property is not covered with a clean soil cap or an impervious covering such as asphalt or cement, soil containing COPCs on the Property remains available for potential direct contact or ingestion. The surface soil is

also susceptible to potential wind- or water-based erosion that could carry COPCs to wetlands on the Property or to surface water drainage ditches that run along the site borders.

3.4.2 Groundwater

Potential exposure pathways exist on the site for shallow groundwater. Contaminants could filter down to groundwater from undiscovered discrete contaminated soil on the Property or migrate from nearby contaminated sites. Based on the topography of the Property and surrounding area, any migration via groundwater would be expected to flow west from Marine Drive. Based on the lithology and site observations noted during the sampling effort, however, there is a limited ability for migration through the surface soils of the yard due to the highly compacted nature of the surficial gravel fill and confining nature of the subsurface clay-like layers.

3.4.3 Air

Generation of airborne dust while moving equipment or materials around, or from soil that is not removed or otherwise contained, could be a direct-contact exposure pathway. Given the highly consolidated nature of the fill material in the yard, airborne dust could likely be managed with implementation of best management practices during ground-disturbing activities on the Property.

4 Conclusions

In general, the results of the sampling agree with the expected site CSM, in that there is surficial surface contamination associated with the backfill material in the yard and the remainder of the areas sampled exhibit indicators of minimal impact from contamination. Based on data collected, there does not appear to be a source of contamination to the Property coming from off-Property sources. Some of the noted exceedances of screening levels are likely attributed to regional background, in particular arsenic, cadmium, and chromium, which are known to be naturally occurring in Whatcom County (Ecology 1994).

4.1 Soils

In the yard area, the surficial compacted gravel material (0 to 0.5 feet bgs) generally exceeded one or more MTCA screening criteria for antimony, arsenic, and cadmium. A few discrete locations exceeded the Method A (unrestricted) criteria for benzo(a)pyrene (TP-5 and TP-6) and total naphthalene (TP-6), and the Method B (direct contact) criteria for benzo(a)pyrene (TP-9) and total cPAH TEQ (TP-5, TP-6, and TP-9).

Shallow native material (approximately 4.5 to 5.5 feet) from the two analyzed subsurface samples in the yard were found to have metals concentrations exceeding the MTCA Method A and Method B (protection of groundwater) criteria (TP-7 and TP-16). However, since groundwater contamination was not detected in shallow groundwater in the vicinity of the yard (see below), this suggests that the presence of metals above the MTCA Method B level is not necessarily impacting groundwater. Native material below 6 feet in the yard and in the forested areas were generally below the MTCA Method A (unrestricted) screening criteria for all COPCs, except for exceedances likely attributed to regional natural background.

Presence of a discrete mound and debris off the northwestern corner of the yard prompted a sample to be collected (TP-3). This sample has numerous screening criteria exceedances (Table 3) and was the only sample to exceed MTCA criteria for lead (Method A), selenium (Method B protection of groundwater), and thallium (Method B direct contact).

The results of TCLP sampling indicate that if portions of the site where samples were collected were to be excavated requiring off-site disposal of excavated material, the soils from these areas would not be classified as hazardous waste. However, the fill soil in the yard areas and debris that are excavated as part of potential development would require the material be managed as "contaminated" for purposes of excavation and disposal.

4.2 Groundwater

Groundwater samples were all below the most conservative MTCA screening levels. This suggests the shallow groundwater below the yard is not contaminated from previous or current site activities. Groundwater was only collected to 16.3 feet bgs, and the possibility of deeper groundwater contamination on site remains. However, based on current data and observed soil units, it suggests that it is unlikely contamination would be present in deeper groundwater due to previous or current activities on the Property.

The possibility of contaminant migration from off site remains as a potential path to soil and groundwater at depths that are below what was sampled on the Property for this effort and should be considered an overall data gap in a full understanding of environmental site conditions. There is also the potential for point sources (i.e., drums) to be buried in the wooded portions of the Property that were not identified in sampling efforts.

The objectives of this sampling effort (Section 1.1) were accomplished in the Phase 2 environmental assessment. Sampling identified a small stockpile of on-site contamination (TP-3), a few discrete locations with PAH contamination in shallow soil intervals, as well as elevated metals concentrations at numerous locations in the fill soils located throughout the yard.

5 References

Anchor QEA, LLC (Anchor QEA), 2020a. *Phase 1 Environmental Site Assessment*. Prepared for ABC Recycling. October 2020.

Anchor QEA, 2020b. *Sampling and Analysis Plan*. Prepared for ABC Recycling. October 2020.

Washington State Department of Ecology (Ecology), 1994. *Natural Background Soil Metals Concentrations in Washington State*. Ecology Publication #94-115.

Tables

Table 1
Soil Collection Summary

Sample Location	Location (NAD83 WA North)		Sample ID	Date Collected	Depth Sampled (ft)	Lithology	Sample Status	
	Northing	Easting					Analyzed [1]	On Hold
Test Pit Soil Samples								
TP-1	1232044.2	650713.1	TP-1-0.5-1.5	10/22/2020 11:45	0.5-1.5	Dry to moist, medium brown, fine grained soil, trace silt, trace gravel (coarse), occasional organics (roots), no odor.	X	
TP-2	1232042.5	650527.9	TP-2-1.5-2	10/22/2020 12:14	1.5-2	Dry to moist, grey-brown, fine grained soil, slight silt, trace clay, no odor.	X	
TP-3	1232184.2	650311.5	TP-3-1.5-2	10/22/2020 12:56	1.5-2	Dry, light grey. fine grained limestone-like material with limestone-like pieces (coarse, angular), chalky odor.	X	
TP-4	1232463.7	650406.8	TP-4-0-0.5	10/21/2020 11:11	0-0.5	Moist, medium brown grey, fine grained soil, trace gravel (fine), slight organics (roots), no odor. Pocket of light grey clayey soil.	X	
			TP-4-3.5-4	10/21/2020 11:33	3.5-4	Moist, light grey, clayey fine grained soil, trace gravel (fine), trace organics (wood pieces), no odor. Interspersed rust-colored soil, trace potentially metallic flakes.		X
TP-5	1232330.0	650233.7	TP-5-0-0.5	10/20/2020 9:57	0-0.5	Moist, dark brown, soft, fine grained soil with gravel (coarse), trace sand, trace organics (wood debris), no odor.	X [2,3]	
TP-6	1232543.6	650283.0	TP-6-0-0.5	10/21/2020 12:13	0-0.5	Moist, light black, fine grained soil, moderate gravel (fine), trace organics (wood), no odor. Slight sheen (metallic). One discrete pocket with metallic flakes.	X [2]	
TP-7	1232515.9	650083.5	TP-7-4.5-5	10/21/2020 10:16	4.5-5	Moist, medium brown, fine grained soil, trace gravel (fine to coarse), trace organics (roots), no odor.	X [2]	
TP-8	1232657.513	650184.4	TP-8-0-0.5	10/20/2020 11:50	0-0.5	Dry, light brown fine grained soil with gravel (fine to coarse), no odor.	X	
			TP-8-2.5-3	10/20/2020 12:17	2.5-3	Moist, light grey brown, fine grained soil with gravel (fine to coarse), trace sand, no odor. Slight rust-like staining.		X
TP-9	1232718.6	649975.9	TP-9-0-0.5	10/20/2020 8:37	0-0.5	Dry, light brown, fine grained soil with gravel (fine to coarse), slight anthropogenic material (potting soil-like pellets) no odor.	X	
TP-10	1232837.6	650104.3	TP-10-2-2.5	10/20/2020 14:35	2-2.5	Moist, light brown grey, gravelly fine grained soil, no odor.		X
TP-11	1232794.6	649899.3	TP-11-0-0.5	10/20/2020 15:12	0-0.5	Dry to moist, light brown, fine grained soil with gravel (fine to coarse), slight anthropogenic material (potting soil-like pellets), no odor.		X
			TP-11-1.5-2	10/20/2020 15:31	1.5-2	Moist, light grown, fine grained soil with sand, trace gravel (fine), no odor.		X
TP-12	1232860.0	649821.7	TP-12-0-0.5	10/20/2020 16:13	0-0.5	Moist, light brown grey, fine grained clayey soil, trace gravel (fine to coarse), trace organics (roots), no odor.	X	
			TP-12-3-3.5	10/20/2020 16:38	3-3.5	Moist, light brown, fine grained soil, trace silt, trace clay, trace organics (wood-like), no odor.		X
TP-13	1233066.3	649872.3	TP-13-1.5-2	10/22/2020 8:37	1.5-2	Moist, light brown, fine grained soil, trace gravel (fine), slightly clayey, trace organics (fine roots), no odor. Pockets of gray, fine sand.	X	
TP-14	1233136.1	649748.0	TP-14-1.5-2	10/22/2020 10:34	1.5-2	Dry to moist, medium brown, fine grained soil, moderate silt, trace gravel (fine), trace organics (roots), no odor.	X	
TP-15	1233072.7	649748.2	TP-15-1-1.5	10/22/2020 10:10	1-1.5	Dry to moist, medium brown, fine grained soil, slight clay, trace gravel (fine to coarse), trace organics (fine roots), no odor.	X	
TP-16	1232942.9	650049.0	TP-16-0-0.5	10/21/2020 14:10	0-0.5	Wet, dark brown, coarse grained soil with sand and gravel (fine to coarse), trace organics (roots), no odor.		X
			TP-16-5-5.5	10/21/2020 15:27	5-5.5	Moist, dark brown, fine grained soil, moderate silt, moderate organics (fine roots), no odor. Trace pockets of light grey, fine grained soil.	X	
TP-17	1233035.6	649785.6	TP-17-1.5-2	10/22/2020 9:26	1.5-2	Dry to moist, dark brown, fine grained soil, trace gravel (fine to coarse, subrounded), moderate silt, moderate organics (fine roots), trace biota (worms), no odor.	X [2]	

Table 1
Soil Collection Summary

Sample Location	Location (NAD83 WA North)		Sample ID	Date Collected	Depth Sampled (ft)	Lithology	Sample Status	
	Northing	Easting					Analyzed [1]	On Hold
Soil Boring Samples								
GP-1	1232389.1	650439.2	GP-1-5.7-9.7	10/26/2020 13:15	5.7-9.3	5.7-9.3 ft: Dry, medium dense, grey with rust-colored spots, clay. @ 9.3 ft: Thin layer of moist, brown grey, sand (fine), trace clay. @ 9.6 ft: Grades to dry, hard, brown clay.	X [2]	
			GP-1-10-12.3	10/26/2020 13:20	10-12.3	10-12 ft: Dry, hard brown clay. 12-12.3 ft: Moist, medium dense, brown sandy clay.		X
			GP-1-20-22	10/26/2020 13:30	20-22	20-20.8 ft: Wet, loose, brown, slightly silty sand (fine). Sand and moisture decreasing. @ 20.8 ft: Grades to no sand. 20.8-22 ft: Dry, hard, brown clay.	X [3]	
GP-2	1232265.9	650233.2	GP-2-8-9	10/26/2020 10:30	8-9	8-9 ft: Dry, light brown with pockets of grey, clayey, silty sand.	X	
			GP-2-14-20	10/26/2020 10:45	14-20	14-20 ft: Dry, hard, brown clay.		X
			GP-2-25-27	10/26/2020 10:50	25-27	25-27 ft: Wet, loose, brown, sand (fine).	X	
GP-3	1232725.4	650246.4	GP-3-12.7-13.4	10/27/2020 12:05	12.7-13.4	12.7-13.4 ft: Moist, dense, grey and brown sandy silt (fine).		X
			GP-3-14.4-15.9	10/27/2020 12:15	14.4-15.9	14.4-15.9 ft: Moist, medium dense, brown, sand (fine).	X	
GP-4	1232625.2	650044.4	GP-4-7.8-8.7	10/27/2020 10:20	7.8-8.7	7.8-8.7 ft: Moist, medium stiff, black, clayey silt, trace organics (fibers). Color grades to brown.	X	
			GP-4-15-18.7	10/27/2020 10:30	15-18.7	15-18.7 ft: Wet, loose, brown, sand (fine), trace silt. Moisture decreases to moist.	X	
GP-5	1233018.8	650012.5	GP-5-6.9-7.5	10/26/2020 15:15	6.9-7.5	6.9-7.5 ft: Moist, medium dense, dark grey, silty clay. Moisture increases in interval.	X	
			GP-5-10-11	10/26/2020 15:25	10-11	10-11 ft: Wet, loose, grey, silty sand (fine).		X
			GP-5-20-22	10/26/2020 15:30	20-22	20-22 ft: Wet, soft, grey, sandy silt with moderate clay. @ 20.5-20.9 ft: Transitions to silty clay.	X	
GP-6	1232952.4	649764.8	GP-6-10.8-15	10/26/2020 16:50	10.8-15	10.8-15 ft: Wet, loose, brown, sand (fine), trace silt. @ 12-12.3 ft: Void space.	X	

Notes:
1. All soil samples were analyzed for metals, total solids, PAHs, NWTPH-Dx, and NWTPH-Gx.
2. Select samples were analyzed for PCBs, dioxins and furans, and/or TCLP metals.
3. Field duplicates collected.

Abbreviations:
ft: feet
NAD83 WA North: State Plane Washington North, North American Datum 83
NWTPH-Dx: diesel and heavy oil range organics
NWTPH-Gx: gasoline range organics
PAHs: polycyclic aromatic hydrocarbons
PCBs: polychlorinated biphenyls
TCLP: toxicity characteristic leaching procedure
TPH: total petroleum hydrocarbons

Table 2
Groundwater Collection Summary

Sample Location	Location (NAD83 WA North)		Sample ID	Date Collected	Depth to Groundwater (ft)	Depth Sampled (ft)	Flow Rate (L/min)
	Easting	Northing					
GP-2	1232265.9	650233.2	--	--	24.0	--	--
GP-3	1232725.4	650246.4	GP-3-GW	10/27/2020 13:15	12.0	16.3	0.50
GP-4	1232625.2	650044.4	--	--	14.0	--	--
GP-6	1232952.4	649764.8	GP-6-GW	10/26/2020 17:50	8.5	12.0	0.50

Notes:

All groundwater samples were analyzed for PAHs, dissolved metals, NWTPH-Dx, and NWTPH-Gx.

Field parameters were monitored to identify when ambient groundwater conditions were reached. Parameters included pH, specific conductivity, temperature, and dissolved oxygen.

Groundwater found but well dried up during purging at GP-2 and GP-4.

Field duplicate collected at GP-3-GW.

Abbreviations:

--: not applicable

ft: feet

L: liter

min: minute

NAD83 WA North: State Plane Washington North, North American Datum 83

NWTPH-Dx: diesel and heavy oil range organics

NWTPH-Gx: gasoline range organics

PAHs: polycyclic aromatic hydrocarbons

Table 3
Soil Analytical Results

	MTCA Method A Unrestricted	MTCA Method B Direct Contact	MTCA Method B Protection of Groundwater	MTCA Method A Industrial	MTCA Method C Industrial	ABC_Recycling_2020 GP-1_2020 GP-1-20-22 10/26/2020 20 - 22 ft N SO 1232389.113 650439.1881	ABC_Recycling_2020 GP-1_2020 GP-1-20-22-DUP 10/26/2020 20 - 22 ft FD SO 1232389.113 650439.1881	ABC_Recycling_2020 GP-1_2020 GP-1-5.7-9.7 10/26/2020 5.7 - 9.7 ft N SO 1232389.113 650439.1881
Metals (mg/kg)								
Antimony		32	5.4		1400	3.4 U	3.5 U	3.2 U
Arsenic	20	0.67	2.9	20	88	**6**	**6.3**	**9.3**
Beryllium		160	63		7000	**0.18**	**0.19**	**0.33**
Cadmium	2	80	0.69	2	3500	**0.13**	**0.11**	0.064 U
Chromium	2000	120000	480000	2000	5300000	**42**	**44**	**55**
Copper		3200	280		140000	**35**	**35**	**48**
Lead	250		3000	1000		**2**	**2**	**3.2**
Mercury	2		2.1	2		**0.037**	**0.045**	**0.062**
Nickel		1600	130		70000	**46**	**46**	**58**
Selenium		400	5.2		18000	3.4 U	3.5 U	3.2 U
Silver		400	14		18000	0.17 U	0.18 U	0.16 U
Thallium		0.8	0.23		35	3.4 U	3.5 U	3.2 U
Zinc		24000	6000		1100000	**64**	**62**	**64**
Polycyclic Aromatic Hydrocarbons (µg/kg)								
1-Methylnaphthalene		34000			4500000	4.6 U	4.7 U	4.3 U
2-Methylnaphthalene		320000			14000000	4.6 U	4.7 U	4.3 U
Acenaphthene		4800000	98000		210000000	4.6 U	4.7 U	4.3 U
Acenaphthylene			--			4.6 U	4.7 U	4.3 U
Anthracene		24000000	2300000		1100000000	4.6 U	4.7 U	4.3 U
Benzo(a)anthracene						4.6 U	4.7 U	4.3 U
Benzo(a)pyrene	100	190	3900	2000	130000	4.6 U	4.7 U	4.3 U
Benzo(b)fluoranthene						4.6 U	4.7 U	4.3 U
Benzo(g,h,i)perylene						4.6 U	4.7 U	4.3 U
Benzo(j,k)fluoranthene						4.6 U	4.7 U	4.3 U
Chrysene						4.6 U	4.7 U	4.3 U
Dibenzo(a,h)anthracene						4.6 U	4.7 U	4.3 U
Fluoranthene		3200000	630000		140000000	4.6 U	4.7 U	4.3 U
Fluorene		3200000	100000		140000000	4.6 U	4.7 U	4.3 U
Indeno(1,2,3-c,d)pyrene						4.6 U	4.7 U	4.3 U
Naphthalene	5000	1600000	4500		70000000	4.6 U	4.7 U	4.3 U
Phenanthrene						4.6 U	4.7 U	4.3 U
Pyrene		2400000	650000		110000000	4.6 U	4.7 U	4.3 U
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2)	100	190	3900	2000		4.6 U	4.7 U	4.3 U
Total Naphthalene (1- and 2-Methyl and Naph) (U = 1/2)	5000			5000		4.6 U	4.7 U	4.3 U

Table 3
Soil Analytical Results

	ABC_Recycling_2020 GP-2_2020 GP-2-25-27 10/26/2020 25 - 27 ft N SO 1232265.941 650233.1583	ABC_Recycling_2020 GP-2_2020 GP-2-8-9 10/26/2020 8 - 9 ft N SO 1232265.941 650233.1583	ABC_Recycling_2020 GP-3_2020 GP-3-14.4-15.9 10/27/2020 14.4 - 15.9 ft N SO 1232725.441 650246.3624	ABC_Recycling_2020 GP-4_2020 GP-4-15-18.7 10/27/2020 15 - 18.7 ft N SO 1232625.216 650044.3943	ABC_Recycling_2020 GP-4_2020 GP-4-7.8-8.7 10/27/2020 7.8 - 8.7 ft N SO 1232625.216 650044.3943	ABC_Recycling_2020 GP-5_2020 GP-5-20-22 10/26/2020 20 - 22 ft N SO 1233018.799 650012.5131	ABC_Recycling_2020 GP-5_2020 GP-5-6.9-7.5 10/26/2020 6.9 - 7.5 ft N SO 1233018.799 650012.5131
Metals (mg/kg)							
Antimony	3.3 U	3.3 U	3 U	3.4 U	**4.6**	3.1 U	3.2 U
Arsenic	**5.3**	**9.8**	**3.9**	**6**	**14**	**5**	**7.5**
Beryllium	**0.15**	**0.43**	**0.11**	**0.21**	**0.37**	**0.16**	**0.36**
Cadmium	**0.12**	**0.077**	**0.078**	**0.13**	**0.9**	**0.093**	**0.093**
Chromium	**31**	**60**	**28**	**41**	**37**	**31**	**43**
Copper	**21**	**49**	**16**	**28**	**30**	**19**	**22**
Lead	**2.9**	**4.8**	**1.3**	**2.4**	**44**	**2**	**4.7**
Mercury	**0.038**	**0.085**	**0.016**	**0.03**	**0.095**	**0.024**	**0.059**
Nickel	**29**	**58**	**24**	**39**	**38**	**28**	**33**
Selenium	3.3 U	3.3 U	3 U	3.4 U	3.8 U	3.1 U	3.2 U
Silver	0.16 U	0.17 U	0.15 U	0.17 U	**0.22**	0.15 U	0.16 U
Thallium	3.3 U	3.3 U	3 U	3.4 U	3.8 U	3.1 U	3.2 U
Zinc	**42**	**72**	**30**	**53**	**120**	**36**	**61**
Polycyclic Aromatic Hydrocarbons (µg/kg)							
1-Methylnaphthalene	**8.4**	4.4 U	4 U	4.6 U	**42**	4.1 U	4.2 U
2-Methylnaphthalene	**13**	4.4 U	4 U	4.6 U	**50**	4.1 U	4.2 U
Acenaphthene	**24**	4.4 U	4 U	4.6 U	4 U	4.1 U	4.2 U
Acenaphthylene	4.4 U	4.4 U	4 U	4.6 U	4 U	4.1 U	4.2 U
Anthracene	**25**	4.4 U	4 U	4.6 U	**5.3**	4.1 U	4.2 U
Benzo(a)anthracene	**66**	4.4 U	4 U	4.6 U	**13**	4.1 U	4.2 U
Benzo(a)pyrene	**21**	4.4 U	4 U	4.6 U	**13**	4.1 U	4.2 U
Benzo(b)fluoranthene	**55**	4.4 U	4 U	4.6 U	**15**	4.1 U	4.2 U
Benzo(g,h,i)perylene	**4.8**	4.4 U	4 U	4.6 U	**12**	4.1 U	4.2 U
Benzo(j,k)fluoranthene	**16**	4.4 U	4 U	4.6 U	4 U	4.1 U	4.2 U
Chrysene	**65**	4.4 U	4 U	4.6 U	**20**	4.1 U	4.2 U
Dibenzo(a,h)anthracene	4.4 U	4.4 U	4 U	4.6 U	**4.7**	4.1 U	4.2 U
Fluoranthene	**200**	4.4 U	4 U	4.6 U	**10**	4.1 U	4.2 U
Fluorene	**37**	4.4 U	4 U	4.6 U	4 U	4.1 U	4.2 U
Indeno(1,2,3-c,d)pyrene	**5.8**	4.4 U	4 U	4.6 U	**7.7**	4.1 U	4.2 U
Naphthalene	**7.8**	4.4 U	4 U	4.6 U	**43**	4.1 U	4.2 U
Phenanthrene	**110**	4.4 U	4 U	4.6 U	**28**	4.1 U	4.2 U
Pyrene	**140**	4.4 U	4 U	4.6 U	**9.4**	4.1 U	4.2 U
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2)	**36.15**	4.4 U	4 U	4.6 U	**17.44**	4.1 U	4.2 U
Total Naphthalene (1- and 2-Methyl and Naph) (U = 1/2)	**29.2**	4.4 U	4 U	4.6 U	**135**	4.1 U	4.2 U

Table 3
Soil Analytical Results

	ABC_Recycling_2020 GP-6_2020 GP-6-10.8-15 10/26/2020 10.8 - 15 ft N SO 1232952.405 649764.8397	ABC_Recycling_2020 TP-1_2020 TP-1-0.5-1.5 10/22/2020 0.5 - 1.5 ft N SO 1232044.174 650713.0992	ABC_Recycling_2020 TP-2_2020 TP-2-1.5-2 10/22/2020 1.5 - 2 ft N SO 1232042.502 650527.9031	ABC_Recycling_2020 TP-3_2020 TP-3-1.5-2 10/22/2020 1.5 - 2 ft N SO 1232184.227 650311.4637	ABC_Recycling_2020 TP-4_2020 TP-4-0-0.5 10/21/2020 0 - 0.5 ft N SO 1232463.701 650406.845	ABC_Recycling_2020 TP-5_2020 TP-5-0-0.5 10/20/2020 0 - 0.5 ft N SO 1232330.012 650233.7296	ABC_Recycling_2020 TP-6_2020 TP-6-0-0.5 10/21/2020 0 - 0.5 ft N SO 1232543.611 650282.9897	ABC_Recycling_2020 TP-7_2020 TP-7-4.5-5 10/21/2020 4.5 - 5 ft N SO 1232515.934 650083.4632
Metals (mg/kg)								
Antimony	3.1 U	**3.4**	3.2 U	**26**	**46**	**6**	**5.3**	**8.8**
Arsenic	**3.6**	**11**	**11**	**93**	**100**	**20 J**	**19**	**25**
Beryllium	**0.13**	**0.37**	**0.49**	**0.25**	**0.36**	**0.23**	**0.26**	**0.19**
Cadmium	**0.092**	**0.44**	0.13 U	**79**	**3.8**	**1**	**1.6**	**3**
Chromium	**27**	**28**	**64**	**28**	**26**	**23**	**11**	**25**
Copper	**15**	**17**	**53**	**59**	**90**	**44**	**37**	**40**
Lead	**1.4**	**14**	**6.9**	**2600**	**130**	**90 J**	**15**	**39**
Mercury	**0.022**	**0.039**	**0.067**	**0.25**	**0.25**	**0.47**	**0.11**	**0.11**
Nickel	**28**	**27**	**58**	**8.1**	**17**	**21**	**9**	**22**
Selenium	3.1 U	3.2 U	3.2 U	**30**	3.1 U	2.8 U	2.8 U	3.5 U
Silver	0.16 U	0.32 U	0.32 U	**11**	**0.5**	0.28 U	0.28 U	0.35 U
Thallium	3.1 U	3.2 U	3.2 U	**8.9**	3.1 U	2.8 U	2.8 U	3.5 U
Zinc	**29**	**98**	**87**	**290**	**250**	**210**	**65**	**140**
Polycyclic Aromatic Hydrocarbons (µg/kg)								
1-Methylnaphthalene	4.2 U	**16**	4.3 U	**35**	**540**	**730 J**	**2500**	**78**
2-Methylnaphthalene	4.2 U	**19**	4.3 U	**50**	**800**	**1100 J**	**4400**	**88**
Acenaphthene	4.2 U	4.4 U	4.3 U	4.1 U	82 U	**73 J**	360 U	**4.7**
Acenaphthylene	4.2 U	4.4 U	4.3 U	4.1 U	82 U	**78 J**	76 U	**7**
Anthracene	4.2 U	4.4 U	4.3 U	4.1 U	**82**	**160 J**	**130**	**14**
Benzo(a)anthracene	4.2 U	4.4 U	4.3 U	**6.4**	**130**	**300 J**	**410**	**27**
Benzo(a)pyrene	4.2 U	4.4 U	4.3 U	**4.4**	82 U	**140 J**	**170**	**23**
Benzo(b)fluoranthene	4.2 U	**7.7**	4.3 U	**8.2**	**130**	**340 J**	**330**	**37**
Benzo(g,h,i)perylene	4.2 U	**6.4**	4.3 U	**4.7**	82 U	**120 J**	**170**	**30**
Benzo(j,k)fluoranthene	4.2 U	4.4 U	4.3 U	4.1 U	82 U	**92 J**	76 U	**7.3**
Chrysene	4.2 U	**7.9**	4.3 U	**14**	**220**	**500 J**	**940**	**40**
Dibenzo(a,h)anthracene	4.2 U	4.4 U	4.3 U	4.1 U	82 U	**47 J**	**87**	**8.3**
Fluoranthene	4.2 U	**7.3**	4.3 U	**7.5**	**170**	**530 J**	**350**	**40**
Fluorene	4.2 U	4.4 U	4.3 U	4.1 U	84 U	**90 J**	**410**	**9.3**
Indeno(1,2,3-c,d)pyrene	4.2 U	4.4 U	4.3 U	4.1 U	82 U	**96 J**	76 U	**22**
Naphthalene	4.2 U	**15**	4.3 U	**22**	**280**	**510 J**	**1200**	**77**
Phenanthrene	4.2 U	**15**	4.3 U	**40**	**620**	**870 J**	**3600**	**89**
Pyrene	4.2 U	**6.2**	4.3 U	**6.6**	**180**	**500 J**	**490**	**37**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2)	4.2 U	**3.929**	4.3 U	**6.615**	**81.5**	**232.5 J**	**269.7**	**33.56**
Total Naphthalene (1- and 2-Methyl and Naph) (U = 1/2)	4.2 U	**50**	4.3 U	**107**	**1620**	**2340 J**	**8100**	**243**

Table 3
Soil Analytical Results

	ABC_Recycling_2020 TP-8_2020 TP-8-0-0.5 10/20/2020 0 - 0.5 ft N SO 1232657.513 650184.4187	ABC_Recycling_2020 TP-9_2020 TP-9-0-0.5 10/20/2020 0 - 0.5 ft N SO 1232718.597 649975.912	ABC_Recycling_2020 TP-12_2020 TP-12-0-0.5 10/20/2020 0 - 0.5 ft N SO 1232859.97 649821.6908	ABC_Recycling_2020 TP-13_2020 TP-13-1.5-2 10/22/2020 1.5 - 2 ft N SO 1233066.29 649872.2961	ABC_Recycling_2020 TP-14_2020 TP-14-1.5-2 10/22/2020 1.5 - 2 ft N SO 1233136.099 649748.0338	ABC_Recycling_2020 TP-15_2020 TP-15-1-1.5 10/22/2020 1 - 1.5 ft N SO 1233072.659 649748.2293	ABC_Recycling_2020 TP-16_2020 TP-16-5-5.5 10/21/2020 5 - 5.5 ft N SO 1232942.891 650049.0335	ABC_Recycling_2020 TP-17_2020 TP-17-1.5-2 10/22/2020 1.5 - 2 ft N SO 1233035.603 649785.6025
Metals (mg/kg)								
Antimony	**16**	**75**	**32**	3.2 U	3 U	3 U	3.7 U	4.1 U
Arsenic	**42 J**	**160**	**70 J**	**6.5**	**7.2**	**9.9**	**6.4**	**13**
Beryllium	0.11 U	**0.17**	0.11 U	**0.34**	**0.29**	**0.34**	**0.52**	**1.8**
Cadmium	**0.76**	**0.47**	**0.95**	0.13 U	**0.13**	**0.17**	**0.79**	**0.71**
Chromium	**9.1**	**74**	**16**	**50**	**44**	**45**	**43**	**16**
Copper	**38**	**240**	**89**	**41**	**27**	**43**	**30**	**36**
Lead	**26 J**	**110**	**29 J**	**3.9**	**3.8**	**4**	**16**	**31**
Mercury	**0.3**	**0.14**	**0.26**	**0.051**	**0.042**	**0.047**	**0.048**	**0.34**
Nickel	**7.6**	**52**	**13**	**48**	**35**	**48**	**41**	**18**
Selenium	2.6 U	2.6 U	2.7 U	3.2 U	3 U	3 U	3.7 U	4.1 U
Silver	0.26 U	**0.41**	0.27 U	0.32 U	0.3 U	0.3 U	**0.38**	0.41 U
Thallium	2.6 U	2.6 U	2.7 U	3.2 U	3 U	3 U	3.7 U	4.1 U
Zinc	**85**	**280**	**100**	**64**	**49**	**77**	**130**	**42**
Polycyclic Aromatic Hydrocarbons (µg/kg)								
1-Methylnaphthalene	**23 J**	70 U	**31 J**	4.2 U	4 U	4 U	**39**	**250**
2-Methylnaphthalene	**41 J**	**87**	**56 J**	**4.4**	4 U	4 U	**48**	**250**
Acenaphthene	**5.4 J**	70 U	**4.2 J**	4.2 U	4 U	4 U	4.9 U	12 U
Acenaphthylene	3.5 UJ	70 U	3.6 UJ	4.2 U	4 U	4 U	**5.5**	14 U
Anthracene	**8.4 J**	70 U	3.6 UJ	4.2 U	4 U	4 U	**7.1**	**29**
Benzo(a)anthracene	**61 J**	**840**	**13 J**	4.2 U	4 U	4 U	**11**	**43**
Benzo(a)pyrene	**53 J**	**960**	**8.6 J**	4.2 U	4 U	4 U	**11**	**20**
Benzo(b)fluoranthene	**83 J**	**1300**	**18 J**	4.2 U	4 U	4 U	**30**	**25**
Benzo(g,h,i)perylene	**43 J**	**760**	**8.8 J**	4.2 U	4 U	4 U	**23**	**18**
Benzo(j,k)fluoranthene	**20 J**	**410**	3.6 UJ	4.2 U	4 U	4 U	**6**	4.4 U
Chrysene	**72 J**	**770**	**27 J**	4.2 U	4 U	4 U	**25**	**37**
Dibenzo(a,h)anthracene	**11 J**	**180**	3.6 UJ	4.2 U	4 U	4 U	4.9 U	**5.3**
Fluoranthene	**78 J**	**790**	**18 J**	4.2 U	4 U	4 U	**49**	**36**
Fluorene	**8 J**	70 U	**11 J**	4.2 U	4 U	4 U	4.9 U	16 U
Indeno(1,2,3-c,d)pyrene	**40 J**	**740**	**6.7 J**	4.2 U	4 U	4 U	**17**	**9.1**
Naphthalene	**15 J**	250 U	**20 J**	4.2 U	4 U	4 U	**86**	**98**
Phenanthrene	**66 J**	**380**	**58 J**	4.2 U	4 U	4 U	**66**	**160**
Pyrene	**77 J**	**790**	**17 J**	4.2 U	4 U	4 U	**32**	**39**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2)	**75.22 J**	**1314.7**	**13 J**	4.2 U	4 U	4 U	**17.895**	**28.83**
Total Naphthalene (1- and 2-Methyl and Naph) (U = 1/2)	**79 J**	**247**	**107 J**	**8.6**	4 U	4 U	**173**	**598**

Table 3
Soil Analytical Results

	MTCA Method A Unrestricted	MTCA Method B Direct Contact	MTCA Method B Protection of Groundwater	MTCA Method A Industrial	Task Location ID Sample ID Sample Date Depth Sample Type Matrix X Y MTCA Method C Industrial	ABC_Recycling_2020 GP-1_2020 GP-1-20-22 10/26/2020 20 - 22 ft N SO 1232389.113 650439.1881	ABC_Recycling_2020 GP-1_2020 GP-1-20-22-DUP 10/26/2020 20 - 22 ft FD SO 1232389.113 650439.1881	ABC_Recycling_2020 GP-1_2020 GP-1-5.7-9.7 10/26/2020 5.7 - 9.7 ft N SO 1232389.113 650439.1881
Dioxin Furans (ng/kg)								
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)		13			1700	--	--	0.0323 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)						--	--	0.0816 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)						--	--	0.14 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)						--	--	0.147 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)						--	--	0.165 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)						--	--	**2.6**
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)						--	--	**34.6**
Total Tetrachlorodibenzo-p-dioxin (TCDD)						--	--	**0.134**
Total Pentachlorodibenzo-p-dioxin (PeCDD)						--	--	**0.194**
Total Hexachlorodibenzo-p-dioxin (HxCDD)		160				--	--	**1.38 EMPC**
Total Heptachlorodibenzo-p-dioxin (HpCDD)						--	--	**6.48**
2,3,7,8-Tetrachlorodibenzofuran (TCDF)						--	--	0.0247 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)						--	--	0.0301 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)						--	--	0.0256 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)						--	--	0.0403 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)						--	--	0.0387 U
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)						--	--	0.0675 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)						--	--	0.0418 U
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)						--	--	0.0849 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)						--	--	0.0805 U
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)						--	--	0.101 U
Total Tetrachlorodibenzofuran (TCDF)						--	--	**0.0999**
Total Pentachlorodibenzofuran (PeCDF)						--	--	0.0301 U
Total Hexachlorodibenzofuran (HxCDF)						--	--	0.0675 U
Total Heptachlorodibenzofuran (HpCDF)						--	--	0.0849 U
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)		13			1700	--	--	**0.13171365**

Table 3
Soil Analytical Results

	ABC_Recycling_2020 GP-2_2020 GP-2-25-27 10/26/2020 25 - 27 ft N SO 1232265.941 650233.1583	ABC_Recycling_2020 GP-2_2020 GP-2-8-9 10/26/2020 8 - 9 ft N SO 1232265.941 650233.1583	ABC_Recycling_2020 GP-3_2020 GP-3-14.4-15.9 10/27/2020 14.4 - 15.9 ft N SO 1232725.441 650246.3624	ABC_Recycling_2020 GP-4_2020 GP-4-15-18.7 10/27/2020 15 - 18.7 ft N SO 1232625.216 650044.3943	ABC_Recycling_2020 GP-4_2020 GP-4-7.8-8.7 10/27/2020 7.8 - 8.7 ft N SO 1232625.216 650044.3943	ABC_Recycling_2020 GP-5_2020 GP-5-20-22 10/26/2020 20 - 22 ft N SO 1233018.799 650012.5131	ABC_Recycling_2020 GP-5_2020 GP-5-6.9-7.5 10/26/2020 6.9 - 7.5 ft N SO 1233018.799 650012.5131
Dioxin Furans (ng/kg)							
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	--	--	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	--	--	--	--	--	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	--	--	--	--	--	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	--	--	--	--	--	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	--	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	--	--	--	--	--	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	--	--	--	--	--	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	--	--	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	--	--	--	--	--	--	--
Total Tetrachlorodibenzofuran (TCDF)	--	--	--	--	--	--	--
Total Pentachlorodibenzofuran (PeCDF)	--	--	--	--	--	--	--
Total Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	--	--
Total Heptachlorodibenzofuran (HpCDF)	--	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)	--	--	--	--	--	--	--

Table 3
Soil Analytical Results

	ABC_Recycling_2020 GP-6_2020 GP-6-10.8-15 10/26/2020 10.8 - 15 ft N SO 1232952.405 649764.8397	ABC_Recycling_2020 TP-1_2020 TP-1-0.5-1.5 10/22/2020 0.5 - 1.5 ft N SO 1232044.174 650713.0992	ABC_Recycling_2020 TP-2_2020 TP-2-1.5-2 10/22/2020 1.5 - 2 ft N SO 1232042.502 650527.9031	ABC_Recycling_2020 TP-3_2020 TP-3-1.5-2 10/22/2020 1.5 - 2 ft N SO 1232184.227 650311.4637	ABC_Recycling_2020 TP-4_2020 TP-4-0-0.5 10/21/2020 0 - 0.5 ft N SO 1232463.701 650406.845	ABC_Recycling_2020 TP-5_2020 TP-5-0-0.5 10/20/2020 0 - 0.5 ft N SO 1232330.012 650233.7296	ABC_Recycling_2020 TP-6_2020 TP-6-0-0.5 10/21/2020 0 - 0.5 ft N SO 1232543.611 650282.9897	ABC_Recycling_2020 TP-7_2020 TP-7-4.5-5 10/21/2020 4.5 - 5 ft N SO 1232515.934 650083.4632
Dioxin Furans (ng/kg)								
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	--	--	--	--	--	**0.761 EMPC**	**0.0977 EMPC**	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	--	--	--	--	--	**6.41**	**0.665 J**	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	**11.4**	**0.812 EMPC**	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	**110**	**12.6**	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	**32.2**	**5.14**	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	--	--	--	--	--	**2350**	**187**	--
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	--	--	--	--	--	**23400**	**1720**	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	--	--	--	--	--	**13.8 EMPC**	**1.96 EMPC**	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	--	--	--	--	--	**45**	**4.79 EMPC**	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	**669**	**90.1 EMPC**	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	--	--	--	--	--	**6130**	**409**	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	--	--	--	--	--	**1.1**	**0.17 J**	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	--	--	--	--	--	**2.99**	**0.189 J**	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	--	--	--	--	--	**5.52**	**0.361 J**	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	**10.4**	**0.504 J**	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	**4.97**	**0.332 J**	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	**1.6 J**	**0.0933 J**	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	**8**	**0.225 J**	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	--	--	--	--	--	**149**	**10.2**	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	--	--	--	--	--	**7.02**	**0.509 J**	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	--	--	--	--	--	**433**	**43.1**	--
Total Tetrachlorodibenzofuran (TCDF)	--	--	--	--	--	**17.6 EMPC**	**0.69 EMPC**	--
Total Pentachlorodibenzofuran (PeCDF)	--	--	--	--	--	**65.4**	**4.32 EMPC**	--
Total Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	**264**	**15.1**	--
Total Heptachlorodibenzofuran (HpCDF)	--	--	--	--	--	**561**	**41.1**	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)	--	--	--	--	--	**59.0938 J**	**5.37032 J**	--

Table 3
Soil Analytical Results

	ABC_Recycling_2020 TP-8_2020 TP-8-0-0.5 10/20/2020 0 - 0.5 ft N SO 1232657.513 650184.4187	ABC_Recycling_2020 TP-9_2020 TP-9-0-0.5 10/20/2020 0 - 0.5 ft N SO 1232718.597 649975.912	ABC_Recycling_2020 TP-12_2020 TP-12-0-0.5 10/20/2020 0 - 0.5 ft N SO 1232859.97 649821.6908	ABC_Recycling_2020 TP-13_2020 TP-13-1.5-2 10/22/2020 1.5 - 2 ft N SO 1233066.29 649872.2961	ABC_Recycling_2020 TP-14_2020 TP-14-1.5-2 10/22/2020 1.5 - 2 ft N SO 1233136.099 649748.0338	ABC_Recycling_2020 TP-15_2020 TP-15-1-1.5 10/22/2020 1 - 1.5 ft N SO 1233072.659 649748.2293	ABC_Recycling_2020 TP-16_2020 TP-16-5-5.5 10/21/2020 5 - 5.5 ft N SO 1232942.891 650049.0335	ABC_Recycling_2020 TP-17_2020 TP-17-1.5-2 10/22/2020 1.5 - 2 ft N SO 1233035.603 649785.6025
Dioxin Furans (ng/kg)								
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	--	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	--	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	--	--	--	--	--	--	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	--	--	--	--	--	--	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	--	--	--	--	--	--	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	--	--	--	--	--	--	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	--	--	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	--	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	--	--	--	--	--	--	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	--	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	--	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	--	--	--	--	--	--	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	--	--	--	--	--	--	--	--
Total Tetrachlorodibenzofuran (TCDF)	--	--	--	--	--	--	--	--
Total Pentachlorodibenzofuran (PeCDF)	--	--	--	--	--	--	--	--
Total Hexachlorodibenzofuran (HxCDF)	--	--	--	--	--	--	--	--
Total Heptachlorodibenzofuran (HpCDF)	--	--	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)	--	--	--	--	--	--	--	--

Table 3
Soil Analytical Results

Notes:
Detected concentration is greater than MTCA Method A Unrestricted screening level.
Detected concentration is greater than MTCA Method B Direct Contact screening level.
Detected concentration is greater than MTCA Method B Protection of Groundwater screening level.
Detected concentration is greater than MTCA Method A Industrial screening level.
Detected concentration is greater than MTCA Method C Industrial screening level.

Bold: Detected result
-- : not applicable
µg/kg: micrograms per kilogram
cPAH: carcinogenic polycyclic aromatic hydrocarbon
EMPC: estimated maximum possible concentration
FD: field duplicate
ft: feet
J: Estimated value
mg/kg: miligrams per kilogram
MTCA: Model Toxics Control Act
N: Presumptive Evidence
ng/kg: nanogram per kilogram
SO: soil
TEQ: toxic equivalents quotient
U: Compound analyzed, but not detected above detection limit
UJ: Compound analyzed, but not detected above estimated detection limit

Table 4
Soil TCLP Metals Analytical Results

	Task	ABC_Recycling_2020	ABC_Recycling_2020	ABC_Recycling_2020	ABC_Recycling_2020
	Location ID	GP-1_2020	TP-17_2020	TP-5_2020	TP-7_2020
	Sample ID	GP-1-5.7-9.7	TP-17-1.5-2	TP-5-0-0.5	TP-7-4.5-5
	Sample Date	10/26/2020	10/22/2020	10/20/2020	10/21/2020
	Depth	5.7 - 9.7 ft	1.5 - 2 ft	0 - 0.5 ft	4.5 - 5 ft
	Sample Type	N	N	N	N
	Matrix	SO	SO	SO	SO
	X	1232389.1	1233035.6	1232330.0	1232515.9
	Y	650439.2	649785.6	650233.7	650083.5
	Toxicity Characteristic Threshold for Hazardous Waste				
Leachable Metals (µg/L)					
Arsenic	5000	400 U	400 U	400 U	400 U
Barium	100000	**470**	**1500**	**450**	**460**
Cadmium	1000	20 U	20 U	20 U	20 U
Chromium	5000	20 U	20 U	20 U	20 U
Lead	5000	200 U	200 U	200 U	200 U
Mercury	200	5 U	5 U	5 U	5 U
Selenium	1000	400 U	400 U	400 U	400 U
Silver	5000	40 U	40 U	40 U	40 U

Notes:

Detected concentration is greater than Toxicity Characteristic Threshold for Hazardous Waste

Bold: Detected result

U: Compound analyzed, but not detected above detection limit

N: normal sample

µg/L: micrograms per liter

ft: feet

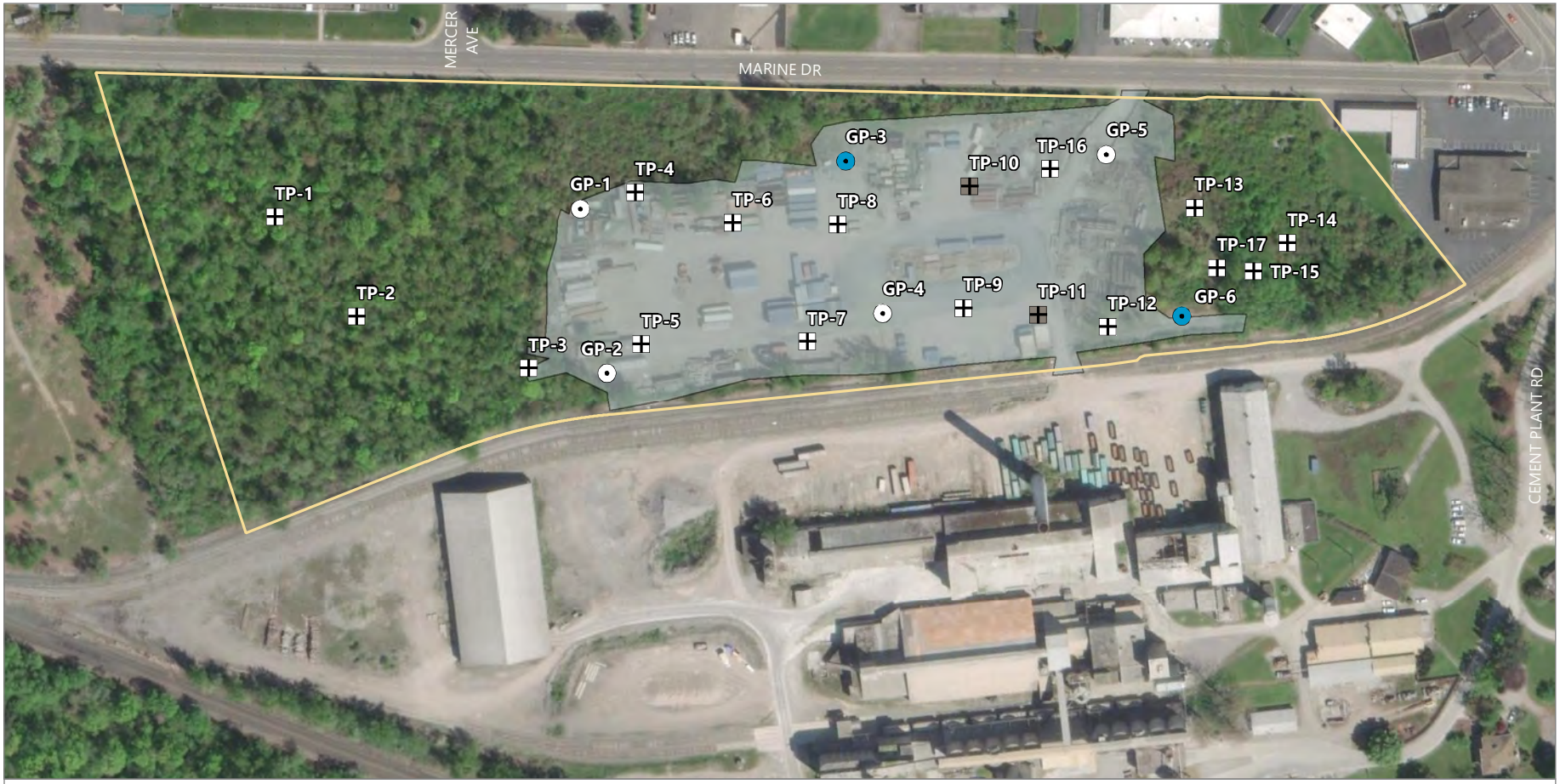
SO: soil

Table 5
Groundwater Analytical Results

		Task	ABC_Recycling_2020	ABC_Recycling_2020	ABC_Recycling_2020
		Location ID	GP-3_2020	GP-3_2020	GP-6_2020
		Sample ID	GP-3-GW	GP-3-GW-DUP	GP-6-GW
		Sample Date	10/27/2020	10/27/2020	10/26/2020
		Depth	16.3 - 16.3 ft	16.3 - 16.3 ft	12 - 12 ft
		Sample Type	N	FD	N
		Matrix	WG	WG	WG
		X	1232725.4	1232725.4	1232952.4
		Y	650246.4	650246.4	649764.8
	MTCA Method A	MTCA Method B			
Metals, Dissolved (µg/L)					
Antimony		6.4	1 U	1 U	1 U
Arsenic	5	4.8	**0.68**	**0.56**	**0.76**
Beryllium		32	0.2 U	0.2 U	0.2 U
Cadmium	5	8	0.2 U	0.2 U	0.2 U
Chromium	50	--	1 U	1 U	1 U
Copper		640	1 U	1 U	1 U
Lead	15		0.5 U	0.5 U	0.5 U
Mercury	2		0.025 U	0.025 U	0.025 U
Nickel		320	**13**	**15**	**17**
Selenium		80	**1.4**	**1.4**	**5.6**
Silver		80	0.2 U	0.2 U	0.2 U
Thallium		0.16	0.2 U	0.2 U	0.2 U
Zinc		4800	**7**	**6.6**	**3**
Polycyclic Aromatic Hydrocarbons (µg/L)					
1-Methylnaphthalene		1.5	0.056 U	0.051 U	0.06 U
2-Methylnaphthalene		32	0.056 U	0.051 U	0.06 U
Acenaphthene		960	0.056 U	0.051 U	0.06 U
Acenaphthylene			0.056 U	0.051 U	0.06 U
Anthracene		4800	0.056 U	0.051 U	0.06 U
Benzo(a)anthracene			0.0056 U	0.0051 U	0.006 U
Benzo(a)pyrene	0.1	0.2	0.0056 U	0.0051 U	0.006 U
Benzo(b)fluoranthene			0.0056 U	**0.0053**	0.006 U
Benzo(g,h,i)perylene			0.0056 U	0.0051 U	0.006 U
Benzo(j,k)fluoranthene			0.0056 U	0.0051 U	0.006 U
Chrysene			0.0056 U	0.0051 U	0.006 U
Dibenzo(a,h)anthracene			0.0056 U	0.0051 U	0.006 U
Fluoranthene		640	0.056 U	0.051 U	0.06 U
Fluorene		640	0.056 U	0.051 U	0.06 U
Indeno(1,2,3-c,d)pyrene			0.0056 U	0.0051 U	0.006 U
Naphthalene	160	160	0.056 U	0.051 U	0.06 U
Phenanthrene			0.056 U	0.051 U	0.06 U
Pyrene		480	0.056 U	0.051 U	0.06 U
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2)	0.1	0.2	0.0056 U	**0.004126**	0.006 U
Total Naphthalene (1- and 2-Methyl and Naph) (U = 1	160		0.056 U	0.051 U	0.06 U
Total Petroleum Hydrocarbons (mg/L)					
Diesel range hydrocarbons	0.5		**0.12**	**0.11**	0.1 U
Gasoline range hydrocarbons	0.8		0.1 U	0.1 U	0.1 U
Residual range hydrocarbons	0.5		**0.29**	**0.27**	0.2 U

Notes:
Detected concentration is greater than MTCA Method A Groundwater screening level
Detected concentration is greater than MTCA Method B Groundwater Direct Contact screening level
Bold: Detected result
µg/L: micrograms per liter
cPAH: carcinogenic polycyclic aromatic hydrocarbon
FD: field duplicate
ft: feet
mg/L: miligrams per liter
MTCA: Model Toxics Control Act
N: normal sample
TEQ: toxic equivalents quotient
U: Compound analyzed, but not detected above detection limit
WG: groundwater

Figures



LEGEND:

- Geoprobe Boring Location
- Geoprobe Boring Locations with Groundwater Sample
- Test Pit Location (Analysis Triggered)
- Test Pit Location (No Analysis Triggered)
- Extent of Observed Fill
- Approximate Site Boundary

0 250
Feet

Publish Date: 2020/11/13, 10:34 AM | User: jsfox
Filepath: \\orcas\GIS\Jobs\ABC_Recycling_2005\MarineDrive\Maps\Phase_II_Report\AQ_PhaseII_SampleLocations.mxd

ANCHOR QEA

Figure 1
Actual Sample Locations
Phase 2 Environmental Assessment Report
Marine Drive Property

Appendix A
Field Forms

Daily Log

~~Esquimalt Harbour Remediation Project~~ (EH)

PROJECT NAME: ABC Recycling **DATE:** 10 - 19 - 2020

SITE LOCATION: 741 Marine Drive **PERSONNEL:** TK

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW

SUNNY | (CLOUDY) | RAIN | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: (°F) 53 . °C [Circle appropriate units]

TIME	COMMENTS
See Notes on bottom of page for detailed logging	
Equipment on site:	
0756	Arrive onsite, Marker Const. on site check-in @ Lehigh office, sign to Dave Parsons about week/logistics, approval of access paths
0808	Drive over to yard, HTS tailgate, discuss access path w/ Marker Const.
0812	Begin utility locate, check main access points (driveways) - no utilities entering property
0824	continue utility locate checking edges of yard, check along Marine Drive - confirm gas line off edge of sidewalk.
0853	APS done w/ survey - wraps up + departs site
*0756	note from discussion w/ Dave Parsons - NW Recycling is current tenant for the property ABC is considering purchasing
0956	walked paths cut by Marker - arrive first at "Y" in path - L = TP2, R = continue on path to clearing w/ cedar, old encampment. Go on L path out of clearing to location near TP1
1017	Move to southern portion of yard for walk paths
1139	find brush clearing on souther potion - moving TH to more mid-location to test mound area
1141	Sign out @ main office + depart site
~~Samples delivered to lab:~~	

(EH)

Notes: Work performed, Phone calls made, Problems Issues/Resolutions, Visitors on site, Deviations from the Workplan Safety infractions, Important comments/instructions to contractors

Signature: Tara Kamila

Daily Log

ANCHOR QEA

PROJECT NAME: ABC Recycling Phase 2 **DATE:** 10-20-2020

SITE ADDRESS: 741 Marine Drive **PERSONNEL:** MH, TK, JP

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW | ? — SUNNY | CLOUDY | RAIN

LIGHT | MEDIUM | HEAVY

TEMPERATURE: °F 52 . °C [Circle appropriate units]

TIME	COMMENTS
0838	ARRIVE onsite, check-in @ Lehigh office
0857	DRIVE over to yard, H+S tailgate, DRIEntation to site/sample locations
0931	on location @ TP-5, prep gear
0957	collect TP-5-0-0.5 (6 jars + 1 vial)
1016	~~collect~~ TP-5-@ 1 ft, concrete - no penetration w/ bucket of excavator. Photo taken
1019	Move/adjust location w/ 10 ft from 1st attempt (10 ft E)
1041	Attempt #3, w/ 10 ft N (TP-5-B in GPS) (TP-5-A in GPS)
1053	Attempt #4, w/ 10 ft S (TP-5-C in GPS)
1101	Fill holes - concrete slab-like surface @ each location
1135	Discuss TP 5/concrete w/ Andy
1140	On location @ TP-8
1150	Collect TP-8-0-0.5 (6 jars + 1 vial)
1217	Collect TP-8-2.5-3 (9 jars + 1 vial) PCBs + D/F tested
1322	on location @ TP-10
~~1334~~ 1435	collect TP-10-~~2~~-2.5, very compact material. collected from decanned bucket of excavator to collect sufficient material given extremely compact/glacial-till-like nature of material. collected dup (12 jars + 2 vials)
1508	on location @ TP-11
1512	collect TP-11-0-0.5 (6 jars + 1 vial)
1531	collect TP-11-1.5-2 (6 jars + 1 vial)
1608	on location @ TP-12
1613	collect TP-12-0-0.5 (9 jars + 1 vial) D/F + PCBs tested
1638	collect TP-12-3-3.5 (6 jars + 1 vial)
1658	WRAP up for day, pack up gear

Signature: Tamsin Kamish

Daily Log

ANCHOR QEA

PROJECT NAME: ARC Recycling Ph 2 **DATE:** 10/21/2020

SITE ADDRESS: 741 Marine Drive **PERSONNEL:** MH, TK

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW | ? — SUNNY | CLOUDY | RAIN — LIGHT | MEDIUM | HEAVY

TEMPERATURE: °F 54 . °C [Circle appropriate units]

TIME	COMMENTS
0758	Arrive onsite, check-in @ Lehigh office
0810	on location @ TP-9, conduct H+S meeting
0837	collect TP-9-0-0.5 (3 jars + 1 vial)
0904	Dig further @ TP-9 to ~2.5 ft
0932	on location @ TP-7, begin digging
1000	Call w/ Matt to discuss sample intervals. Agreed to proceed and continue sampling intervals w/ native/soil material and no longer collect surficial samples provided material @ surface is the same gravelly fill and highly consolidated material found during 10/20/20 sampling. Will note surficial material at location and sample when native material is found
1016	collect TP-7-4.5-5 (3 jars + 1 vial) testing for PCBs/DF. Native-like material @ 4.5 ft bgs
1058	on location TP-4. PID non-functional
1111	collect TP-4-0-0.5 (3 jars + 1 vial) test PCBs/DF
1133	collect TP-4-3.5-4 (3 jars + 1 vial) test PCBs/DF
1156	on location TP-6
1213	collect ~~FB~~ TP-6-0-0.5 (3 jars + 1 vial) test PCBs/DF
1300	~~collect TP-6~~ Abandon deeper sample - refusal @ 4'
1311	Train passing yard on RR spur
1401	on location TP-16
1410	collect TP-16-0-0.5 (3 jars + 1 vial) test PCBs/DF
1527	collect TP-16-5-5.5 (2 jars + 1 vial)
1540	Site walk w/ Matt and Andy
1639	Wrap up day / pack up gear

Signature: Tamara Kamick

Daily Log

ANCHOR QEA

PROJECT NAME: ABC Recycling
DATE: Oct. 22, 2020
SITE ADDRESS: 741 Marine Drive
PERSONNEL: MH, TK

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW

SUNNY | CLOUDY | RAIN | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: °F 51 . °C [circle appropriate units]

TIME	COMMENTS
0727	ARRIVE onsite, check-in @ Lehigh office, prep TRK
	FOR TPs in wooded areas, H+S meeting
0822	on location TP-13
0837	collect TP-13-1.5-2 (3 jars + 1 vial)
0855	Derek Ormerod, Andy Anthony, Brandon Hausmann
	arrive onsite, conduct site walk
0914	on location TP-17
0926	collect TP-17-1.5-2 (3 jars + 1 vial)
0953	on location TP-15
1010	collect TP-15-1.5 (3 jars + 1 vial)
1020	on location TP-14
1034	collect TP-14-1.5-2 (3 jars + 1 vial)
1125	on location TP-1
1145	collect TP-1-0.5-1.5 (3 jars + 1 vial)
1155	Hand augered + characterized mound leading
	into wood from under large cedar (adjacent
	to TP-1 location
1202	On location TP-2
1214	collect TP-2-1.5-2 (3 jars + 1 vial)
1240	on location TP-3
1256	collect TP-3-1.5-2 (3 jars + 1 vial)
1310	Packing up sampler
1501	depart site/sign out @ Lehigh office

Signature: Tamara Kanicki

Daily Log

ANCHOR QEA

PROJECT NAME: ABC Recycling
DATE: 10.26.20
SITE ADDRESS: 741 Marine Drive
PERSONNEL: MH, DP

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW | ?
SUNNY | CLOUDY | RAIN
LIGHT | MEDIUM | HEAVY
TEMPERATURE: °F 37 . °C
[Circle appropriate units]

TIME	COMMENTS
0800	On site, H&S meeting, set up for drilling, station GP-2
1100	Drill to 30'. Samples collected 8'-9', 14'-20', 25'-27'.
	Install screen to develop groundwater 24'-27'.
1145	No groundwater developed. Pack up. Mob to GP-1.
1215	On location, drilling begins.
1340	Reached 30' depth. Three samples collected: 5.7'-9.7', 10'-12.3',
	20'-22'. Duplicate collected on bottom interval sample. Allow
	time for well to develop
1410	Groundwater sample attempted. Filled YSI flow-through cell,
	went dry. Clean up, mobilize to GP-5
1425	On station, start drilling.
1510	Reached 30'. Three samples collected: 6.9-7.5, 10-11, 20-22. Allow
	groundwater to develop.
1550	Groundwater purged ~1/2 gallon and stopped. No GW collected.
	Clean up and mobilize to GP-6.
1615	On station, start drilling.
1650	Reached 30', one sample collected: 10.8-15
1750	Groundwater sample collected from 12'. Cleanup.
1830	Depart site.

Signature:

Daily Log

ANCHOR QEA

PROJECT NAME: ABC Recycling **DATE:** 10-27-20

SITE ADDRESS: 741 Marine Drive **PERSONNEL:** MH, DP

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW — LIGHT | MEDIUM | HEAVY

SUNNY | (CLOUDY) | RAIN | ? — **TEMPERATURE:** (°F) 45 °C (Circle appropriate units)

TIME	COMMENTS
0830	On site, H&S meeting. Set up on GP-4.
0915	Start drilling. Hard drilling, probe stuck, use auger to extract boring. Easy pushing at ~5'. Water encountered ~15'.
1015	Drop casing in hole. Water depth = 14'. Pumped for a few minutes then went dry
1050	Let well recharge for 10 mins. Pumped clear then went dry.
1100	Leave probes in ground to let GW recharge. Mob geoprobe to GP-3.
1128	Start drilling. Drill to 20', break for lunch and let well charge.
1250	Attempt to pump groundwater from GP-4. Purged ~2L & went dry.
1300	Set up on GP-3 for groundwater
1305	Start pumping. Sample collected @ 1315 ~~for~~ at 16.3' depth. Duplicate collected @1320, extra vol. for MS/MSD.
1415	Clean up, pack samples & gear.
1540	Depart site.

Signature: [signature]

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ARC Recycling — TEST PIT #: TP-1
PROJECT NUMBER: 202005-01.01 — DATE BEGAN: 10/22/20
GEOLOGIST: MH — DATE COMPLETED: 10/22/20
EXCAVATION CONTRACTOR: ~~AQ~~ TB — TOTAL DEPTH: 1.5 ft
EXCAVATION METHOD: hand auger — SHEET: 1 OF 1
PIT DIAMETER: 3.5"

SAMPLING DATA					DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of test pit / LITHOLOGIC DESCRIPTION
SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)			
hand auger	TP-1-0.5-1.5	1	1	.5-1.5	1		dry-moist medium brown, fine grained soil, trace silt occassional organics (roots), trace gravel (coarse), no odor
					2		
					3		@1.5 ft: Refusal @ layer of substantial gravel
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes: Collected archive. 3 jars + 1 vial

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC recycling — TEST PIT #: TP-2
PROJECT NUMBER: 202005-01.01 — DATE BEGAN: 1/22/20
GEOLOGIST: MH — DATE COMPLETED: 1/22/20
EXCAVATION CONTRACTOR: — — TOTAL DEPTH: 2'
EXCAVATION METHOD: hand auger — SHEET: 1 OF 1
PIT DIAMETER: 3.5"

Field location of test pit

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
							0-0.75' moist dark brown, organic layer
				~~0.75-2'~~	1		0.75-2' dry to moist gray brown, fine grained soil with slight silt, trace clay
hand auger	TP-2-1.5-2	—	—	1.5-2	2		no odor, no organics
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

TK

Notes: collected alkenine. 3 jars + 1 vial

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: —
EXCAVATION METHOD: hand auger
PIT DIAMETER: 3.5"
TEST PIT #: TP3
DATE BEGAN: 10/22/20
DATE COMPLETED: 10/22/20
TOTAL DEPTH: 2 ft
SHEET: 1 OF 1

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of test pit / LITHOLOGIC DESCRIPTION
					1		0-1' medium gray
hand auger	TP-3-1.5-2	—	—	1.5-2	2		dry, light gray, fine grained limestone like with coarse angular limestone pieces chalky odor, no organics
					3		2' hit refusal w/ coarse piece layer
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes: collected archive. Total = 3 jars + 1 vial

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: AEC
EXCAVATION METHOD: excavator
PIT DIAMETER: 3 Ft

TEST PIT #: TP4
DATE BEGAN: 10/21/20
DATE COMPLETED: 10/21/20
TOTAL DEPTH: 4 Ft
SHEET: 1 OF 1

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of test pit / LITHOLOGIC DESCRIPTION
excavator	TP-4-0-0.5	~	—	0-0.5	1		0-0.5: moist, medium brown grey, fine grained soil, trace gravel (fine), pocket of light grey clayey soil, ~~trace roots~~ (TS) slight organics (roots), no odor
excavator	TP-4-3.5-4	—	—	3.5-4	2		3.5-4: moist, light grey, clayey fine grained soil, trace fine gravel, trace organics (wood pieces), interspersed rust-colored soil, potentially metallic flakes (trace), no odor
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes:

3 ~~4~~ jars + 1 vial for each interval (TS)

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling Ph.2 | TEST PIT #: TP-5
PROJECT NUMBER: 202005-01.01 | DATE BEGAN: 10/20/2020
GEOLOGIST: MH | DATE COMPLETED: 10/20/2020
EXCAVATION CONTRACTOR: AEC | TOTAL DEPTH: 1 ft
EXCAVATION METHOD: EXCAVATOR | SHEET: 1 OF 1
PIT DIAMETER: 3 ft

Field location of test pit: NW corner of yard

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
EXCAVATOR	TP-5-0-0.5	0	—	0-0.5	1		moist, dark brown, soft, fine grained soil, trace (5%) sand, trace wood debris, 1% gravel (coarse), no odor
					2		
					3		@ 1 ft concrete present
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes: 6 x 8oz jars + 1 vial

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: AEC
EXCAVATION METHOD: excavator
PIT DIAMETER: 3 Ft

TEST PIT #: TP-6
DATE BEGAN: 10/21/20
DATE COMPLETED: 10/21/20
TOTAL DEPTH: 4 ft
SHEET: 1 OF 1

Field location of test pit

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
excavator	TP-6-0-0.5	1	1	0-0.5	1		0-0.5ft: moist, light black, fine grained soil, trace organics (wood), moderate coarse gravel, moderate fine gravel, one discrete pocket w/ metallic flakes, no odor. Slight sheen (metallic) @ 1'-2' anthro material in fill
					2		
					3		
					4		@ 3'9" - still in compacted gravel - fill material
					5		
					6		@ 4' - refusal
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes: 3 @ 4 jars + 1 vial. Anthropogenic material (hose, tarp, fabric) in consolidated fill ~1-3 ft in depth)

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: AEC
EXCAVATION METHOD: EXCAVATOR
PIT DIAMETER: 3 Ft

TEST PIT #: TP 7
DATE BEGAN: 10/21/20
DATE COMPLETED: 10/21/20
TOTAL DEPTH: 5 ft
SHEET: 1 OF 1

Field location of test pit

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
	N/A						Surface - 4.5 ft was same gravelly fill (very consolidated) same as 10/20/2020 sample locations - not sampled
					1		
					2		
					3		
EXCAVATOR	TP-7-4.5-5	0		4.5-5	4		moist, medium brown, fine grained soil, trace fine gravel, trace coarse gravel, trace organics (root-like), no odor
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

TZ

Notes: FB 3 jars + 1 vial

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: AEC
EXCAVATION METHOD: excavator
PIT DIAMETER: 3 ft

TEST PIT #: TPB
DATE BEGAN: 10/20/20
DATE COMPLETED: 10/20/20
TOTAL DEPTH: 3 ft
SHEET: 1 OF 1

Field location of test pit: ~~NW corner of yard~~ (TP)

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
excavator	TP-B-0-0.5	0	—	0-0.5	1		dry, light brown, fine grained soil w/ gravel (fine-coarse), no odor
excavator	TP-B-2.5-3	0	—	2.5-3	3		moist, light grey brown, fine grained soil w/ gravel (fine-coarse) trace sand, no odor, slight staining, rust-like

Notes:

9-8oz jars, 1 vial

*PCBs + DIFs tested

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: AEC
EXCAVATION METHOD: EXCAVATOR
PIT DIAMETER: 4 Ft

TEST PIT #: TP 9
DATE BEGAN: 10/2/20
DATE COMPLETED: 10/2/20
TOTAL DEPTH: 2 Ft
SHEET: 1 OF 1

Field location of test pit

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
Excavator	TP-9-0-0.5	0	1	0-0.5	1		dry, light brown, fine grained soil w/ gravel (f-c), trace slight anthropogenic material (potting soil like - debris). Rust-colored soil streak approx 10 inches bgs
					2		
					3		Refusal @ ~2 Ft
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes: 6 jars + 1 vial

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 20200503-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: AEC
EXCAVATION METHOD: excavator
PIT DIAMETER: 3 ft

TEST PIT #: TP-10
DATE BEGAN: 10/20/20
DATE COMPLETED: 10/20/20
TOTAL DEPTH: 2.5 ft
SHEET: 1 OF 1

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of test pit / LITHOLOGIC DESCRIPTION
—	~~TP-10-0-0.5~~	0	~~TR~~	~~0-0.5~~			no sample collected
					1		
excavator	TP-10-2-2.5	D	—	2-2.5	2		@2.5: moist light brown grey, ~~fine grd~~ dense to very dense gravelly fine grained soil, no odor.
					3		collected dup sample.
					4		Deconned bucket of excavator and sampled from bucket to get sufficient volume for sample
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes: material very compacted throughout 0-2.5 ft interval
collected dup

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: AEC
EXCAVATION METHOD: excavator
PIT DIAMETER: 4 ft

TEST PIT #: TP-11
DATE BEGAN: 10/20/20
DATE COMPLETED: 10/20/20
TOTAL DEPTH: 2 ft
SHEET: 1 OF 1

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of test pit / LITHOLOGIC DESCRIPTION
excavator	TP-11-0-0.5	0	—	0-0.5	1		0-1.5 ft: dry to moist, light brown, fine grained soil w/ fine to coarse gravel (~15% fine, 15% coarse) slight anthro material, no odor anthro = like white beads in potting soil
excavator	TP-11-1.5-2	0	—	1.5-2	2		1.5-2 ft: moist, light brown fine grained soil, slight w/ sand, trace (~10%) gravel, no odor
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes: 6 jars + 1 vial for each interval

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: AEC
EXCAVATION METHOD: excavator
PIT DIAMETER: 2 ft

TEST PIT #: TP 12
DATE BEGAN: 10/20/2020
DATE COMPLETED: 10/20/20
TOTAL DEPTH: 3.5
SHEET: 1 OF 1

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of test pit / LITHOLOGIC DESCRIPTION
excavator	TP-12-0-0.5	0		0-0.5	1		moist, light brown-grey, fine grained, clayey soil, trace ~~biota~~ (roots), trace gravel (fine to coarse), no odor
excavator	TP-12-3-3.5	0		3-3.5	3		moist, light brown, fine grained soil, trace silt, trace clay, trace ~~biota~~ (wood-like), no odor
					4		organics
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes: 0-0.5 ft interval tested for DIF + PCBs

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: —
EXCAVATION METHOD: hand auger
PIT DIAMETER: 3.5"

TEST PIT #: TP13
DATE BEGAN: 10/22/20
DATE COMPLETED: 10/22/20
TOTAL DEPTH: 2 ft
SHEET: 1 OF 1

Field location of test pit

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
hand auger	TP-13-1.5-2	→	—	1.5-2	1		moist light brown, pockets of gray fine sand, fine grained soil with trace fine gravel, trace organics (fine roots), slightly oily, no odor
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes: 3 jars + 1 vial. Archive collected

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: —
EXCAVATION METHOD: hand auger
PIT DIAMETER: 35"

TEST PIT #: TP-14
DATE BEGAN: 10/22/20
DATE COMPLETED: 10/22/20
TOTAL DEPTH: 2
SHEET: 1 OF: 1

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
					1		organic layer more gray and clayey
hand auger	TP-14-1.5-2	—	—	1.5-2	2		dry to moist, medium brown, fine grained soil, moderate silt, trace organic (often and thick roots), trace fine gravel, no odor
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Field location of test pit

Notes: 3 jars + 1 vial. collected archive

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: —
EXCAVATION METHOD: hand auger
PIT DIAMETER: 3.5"

TEST PIT #: TP15
DATE BEGAN: 10/21/20
DATE COMPLETED: 10/22
TOTAL DEPTH: 2 ft
SHEET: 1 OF 1

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of test pit / LITHOLOGIC DESCRIPTION
							Same as below
hand auger	TP-15-1-1.5	—	—	1-1.5	1		dry to moist, medium brown fine grained soil
							Slight ~~moderate~~ clayey, very trace organics (fine roots)
					2		trace fine to coarse gravel, no odor
							Same down to 2'
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes: 3 jars + 1 vial. ~~Archive~~ collected

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: AEC
EXCAVATION METHOD: excavator
PIT DIAMETER: 3 Ft

TEST PIT #: TP16
DATE BEGAN: 10/2/20
DATE COMPLETED: 10/2/20
TOTAL DEPTH: 5.5 Ft.
SHEET: 1 OF 1

Field location of test pit: S end of yard adjacent to gate/driveway to Marine DR.

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
excavator	TP-16-0-0.5	0	—	0-0.5	1		0-0.5: wet, dark brown, coarse grained soil w/ sand and w/ f-c gravel, trace organics (roots), no odor
					2		
					3		
					4		native sticks @ ~5 ft
excavator	TP-16-5-5.5	0	—	5-5.5	5		5-5.5ft: moist, dark brown, fine grained soil, moderate silt, moderate organics (fine roots) trace pockets of light grey fine grained soil
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes:
3 jars + 1 vial for 0-0.5 ft interval
2 jars + 1 vial for 5-5.5Ft interval

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 20200S-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: —
EXCAVATION METHOD: hand auger
PIT DIAMETER: 3.5"

TEST PIT #: TP 17
DATE BEGAN: 10/22/20
DATE COMPLETED: 10/22/20
TOTAL DEPTH: 3.5 ft
SHEET: 1 OF 1

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of test pit / LITHOLOGIC DESCRIPTION
							Same as below
hand auger	TP-17-1.5-2	0.0	~	1.5-2	1		dry to moist dark brown fine grained soil with trace fine to coarse subrounded gravel moderate silt, moderate organics (fine roots) no odor, trace biota (worm)
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes:
3 JARS + 1 ~~ARCHIVE~~ vial Archive collected

ANCHOR QEA

SOIL TEST PIT LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST: MH
EXCAVATION CONTRACTOR: —
EXCAVATION METHOD: hand auger
PIT DIAMETER: 3.5"

TEST PIT #: N/A
DATE BEGAN: 10/22/20
DATE COMPLETED: 10/22
TOTAL DEPTH: 1 ft
SHEET: 1 OF 1

Field location of test pit: mound under cedar tree adjacent to TP-1

SAMPLING METHOD	SAMPLE NUMBER	FID / PID (ppm)	RECOVERY (feet)	DEPTH SAMPLED (feet)	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
hand auger	N/A	—	—	N/A	1		0–1 FT: dry to moist, reddish brown, fine grained soil, hit refusal w/ roots - multiple locations attempted
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		

Notes: ~~SOT~~ hand augered + characterized only added per Derek's recommendation

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST/ENGINEER: MH, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH: NA
HOLE DIAMETER: inches
BORING #: GP-1
DATE BEGAN: 10.26.20
DATE COMPLETED: 10-26-20
TOTAL DEPTH: 32.5 ft
PAGE: 1 OF 3
TIME: 1215
SAMPLING METHOD: in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		0-25"- Void						
					2		@25"- Wet, soft, slightly silty, medium brown, f-c sandy organic matter, trace gravel						
					3								
					4		@29"- Dry, black, silty, charcoaly, gravel.						
		GP-1-5.7-9.7			5								
					6		@33"- Dry; grey, sand with trace clay, occasional, peach & white, chalky conglomerates.						
					7								
					8								
					9		@41"- Moist, grey to black clayey sand.						
					10								
					11		@46"- Black, medium stiff clay, trace organics 4" piece of nylon rope.						
					12								
					13								
					14		@53'- Medium-dense, dry, grey w/rust spots clay						
					15								
					16		@57"- Moist, med-dense brown organic clay.						
					17								
					18		@61'- SAA @ 53"						
					19		@112"- Moist, brown & grey f-Sand, trace clay						
					20								

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: sampled 5.7-9.7 ft, 10-12.3 ft, 20-22 ft

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.02
GEOLOGIST/ENGINEER: MM, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH: NA
HOLE DIAMETER: inches
BORING #: GP-1
DATE BEGAN: 10/26/20
DATE COMPLETED: 10/26/20
TOTAL DEPTH: 32.5 ft
PAGE: 2 OF 3
TIME: 1215
SAMPLING METHOD: in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		@115"- Dry, hard, brown clay.						
					2		@144"- Moist, medium-dense, brown sandy clay.						
					3		@152"- Increasing moisture content to wet.						
					4		157"-173"- Void						
					5		@173"- wet, loose, brown slightly silty f-sand						
					6		Decreasing sand, decreasing moisture						
					7		@187"- SAA @115"						
					8		@230"- SAA @173"						
					9		@250"-255"- decreasing sand to none						
					0		255"- SAA @115"						
					1		@269"- Dry, medium dense, dark brown silt						
					2		@271"- Dry, loose, grey and brown f. sand.						
					3		276"-288"- Void						
					4		@288"- wet, loose, f-sand, brown & grey. Occasional clay balls, trace gravel						
					5								
					6								
					7								
					8								
					9								
					0								

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: sampled 5.7-9.7 ft, 10-12.3 ft, 20-22 ft

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling — BORING # GP-1
PROJECT NUMBER: 202005-01.01 — DATE BEGAN 10/26/20
GEOLOGIST/ENGINEER: MH/DP — DATE COMPLETED 10/26/20
DRILLING CONTRACTOR: AEC — TOTAL DEPTH 32.5 ft
DRILLING METHOD: Geoprobe — PAGE 3 OF 3
WATER DEPTH NA — TIME 1215
HOLE DIAMETER ____ inches — SAMPLING METHOD ____ in. by ____ ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		@320" - Moist, loose, brown & grey f-sand						
					2		@323" Layer of Dry, grey, hard gravel						
					3								
					4		@328" - Dry, med-dense, brown clayey, gravelly sand						
					5								
					6		@331 - SAA @115"						
					7		@336 - Dry, loose, grey & brick-colored gravelly f-c sand						
					8								
					9								
					0		338-340 - layer of SAA @115"						
					1								
					2		@340" = Dry, loose grey angular gravel, transitions to f-c sand						
					3								
					4								
					5		@340" - End of boring.						
					6								
					7								
					8								
					9								
					0								

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: sampled 5.7-9.7 ft, 10-12.3 ft, 20-22 ft

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST/ENGINEER: MH, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH: NA
HOLE DIAMETER: 2 inches

BORING #: GP-2
DATE BEGAN: 10.26.20
DATE COMPLETED: 10.26.20
TOTAL DEPTH: 30'
PAGE: 1 OF 3
TIME: 1100
SAMPLING METHOD: in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FBS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
GP					1		Moist, dark grey sand @ 2'. 2" of wood						
					2		@ 29"- 32" Moist, hard, brown clay						
					3		Grey & black gravelly silt						
					4		@ 35" light grey-brown sand. slightly gravelly						
					5		@ 37" Dry, grey, gravelly sand						
					6		@ 42" - Black, charcoaly sandy						
					7		@ 48" - Dry, reddish grey clay						
					8		@ 51" - SAA @ 42"						
					9		@ 52" - SAA @ 35"						
					10		@ 55" - SAA - @ 48"						
					11		@ 58" - SAA @ 42"						
					12		@ 59" - wood waste						
					13		@ 61" - SAA @ 37"						
					14		@ 64" - SAA @ 42" w/ rock gravel						
					15		@ 69" - Dry, medium brown ~~silt~~ silty sand, moderate organic matter						
		GP2-8-9@1030			16		@ 82". Dry, light brown						

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: sampled: 8-9 Ft, 14-20 Ft, 25-27 Ft

w/ pockets of grey, clayey silty sand

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST/ENGINEER: MH, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH: NA
HOLE DIAMETER: 2 inches

BORING #: GP-2
DATE BEGAN: 10.26.20
DATE COMPLETED: 10.26.20
TOTAL DEPTH: 30'
PAGE: 2 OF 3
TIME: 1100
SAMPLING METHOD: in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		w/105" increasing clay content						
					2								
					3		@120" - Dry, dark grey, gravelly sand.						
					4								
					5		128" - Wood						
					6		@132" - Dry, hard, brown clay.						
					7		@147" - Damp, brown, f-sand.						
					8								
		GP2-14-20 @1045			9		@151" - Damp, brown, silty f-sand.						
					0								
					1		@163" - SAA @ 132"						
					2		@240" - Wet, brown, fine-grain sand, trace angular gravel.						
					3								
					4		@254" - Dry, hard, brown clay.						
					5								
					6		@269 - Dry, medium dense, brown f-sand.						
		GP2-25-27			7								
					8		@271" - Dry, loose, brown M-sand						
					9		@298" - Wet, loose, brown f-sand						
					0								

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: sampled. 8-9 ft, 14-20 ft, 25-27 ft

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST/ENGINEER: MH, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH: NA
HOLE DIAMETER: inches

BORING #: GP-2
DATE BEGAN: 10.26.20
DATE COMPLETED: 10.26.20
TOTAL DEPTH: 30'
PAGE: 3 OF 3
TIME: 1100
SAMPLING METHOD: in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		@324": Dry, loose, brown m-sand.						
					2								
					3		@350": End of boring.						
					4								
					5								
					6								
					7								
					8								
					9								
					10								
					11								
					12								
					13								
					14								
					15								
					16								
					17								
					18								
					19								
					20								

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: sampled 8-9ft, 14-20 ft, 25-27 ft

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST/ENGINEER: MH, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH
HOLE DIAMETER inches

BORING # GP-3
DATE BEGAN 10.27.20
DATE COMPLETED 10.27.20
TOTAL DEPTH 20'
PAGE 1 OF 2
TIME ~~1100~~ 1128
SAMPLING METHOD in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		0-19" - Void.						
					2		@19": Moist, medium-dense, gravelly sand, brown & grey.						
					3		@24" - Grades to dry						
					4		37"-39" - Color changes to ~~tan~~.						
					5								
					6		@43"-45" - 2 x 1" angular gravel.						
					7								
					8		@56" - Moist, med-stiff, black, clayey silt,						
					9		trace organic fibers.						
					10		@67" - Dry, dense, grey with rust-colored						
					11		mottling clayey silt.						
					12		@120": Damp, dense,						
					13		grey & brown silty clay.						
					14		130"-132" - Occasional gravel						
					15		~132" - grades to clayey silt						
					16		@152" - grades to f-sandy silt						
					17		@160": Dry, med-dense, brown, slightly f-sandy, clayey silt.						
					18								
					19								
					20								

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: sampled 12.7 - 13.4 ft, 14.4 - 15.9 ft

GW also sampled. See GW log GW dup collected

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST/ENGINEER: MH, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH
HOLE DIAMETER inches
BORING # GP-3
DATE BEGAN 10.27.20
DATE COMPLETED 10.27.20
TOTAL DEPTH 20'
PAGE 2 OF 2
TIME 1128
SAMPLING METHOD in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		@163 - SAA @120"						
					2		@168": SAA 152" w/ interbedded layers of brown clay.						
					3								
					4		@171" - SAA @163"						
					5		@173 - Moist, med-dense brown f-sand.						
					6		@190": Damp, dense, grey clay						
					7		@200" - Grades to med dense.						
					8		@240" - End of boring.						
					9								
					0								
					1								
					2								
					3								
					4								
					5								
					6								
					7								
					8								
					9								
					0								

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: Sampled 12.7 - 13.4 ft, 14.4 - 15.9 ft

GW also sampled, see GW log. GW dup collected.

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST/ENGINEER: MH, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH: NA
HOLE DIAMETER: ___ inches
BORING #: GP-4
DATE BEGAN: 10.27.20
DATE COMPLETED: 10.27.20
TOTAL DEPTH: 20'
PAGE: 1 OF 2
TIME: 0915
SAMPLING METHOD: ___ in. by ___ ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		0" Dry, hard, grey & white gravelly silt, moderate f-c sand.						
					2								
					3		@55" - Dry, hard, grey silty clay.						
					4								
					5		60-78" - Void						
					6		@78" - Damp, loose, brown gravelly f-sand, trace silt.						
					7								
					8		@80 - SAA @ 0"						
					9								
					0		@93" - Damp, med-stiff. black, clayey silt, trace organic fibers						
					1								
					2		@ dp Grades to brown						
					3		@104" - Damp, hard, greenish grey clay.						
					4								
					5		120" - 128" - Void.						
					6		@128" - SAA @ 0"						
					7		@135" - ~~SAA @ 104~~ "Dry hard grey silt						
					8		@147" - Grades to brown dry, hard silt						
					9		@180" - Wet, loose, brown f-sand, trace silt.						
					0								

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: sampled 7.8-8.7 ft, 15-18.7 ft.

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST/ENGINEER: MH, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH: N/A
HOLE DIAMETER: inches
BORING #: GP-4
DATE BEGAN: 10.27.20
DATE COMPLETED: 10.27.20
TOTAL DEPTH: 20'
PAGE: 2 OF 2
TIME: 0915
SAMPLING METHOD: in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		Decreasing moisture content to moist.						
					2		@224 - Damp, med-stiff brown clay.						
					3								
					4		@240' - End of boring.						
					5								
					6								
					7								
					8								
					9								
					10								
					11								
					12								
					13								
					14								
					15								
					16								
					17								
					18								
					19								
					20								

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: Sampled 7.8-8.7 ft, 15-18.7 ft

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST/ENGINEER: MH, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH: N/A
HOLE DIAMETER: inches

BORING #: GP-5
DATE BEGAN: 10.26.20
DATE COMPLETED: 10.26.20
TOTAL DEPTH: 30 ft
PAGE: 1 OF 3
TIME: 1425
SAMPLING METHOD: in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		0-21"- Void						
					2		@21"- Wet, loose, grey & brown sand.						
					3		@24"- Dry, white & gravelly, silt.						
					4		@43"- Dry, dense, grey vf-sand, trace c-sand.						
					5		@48"- Dry, hard, grey, silt w/trace c-sand						
					6		@60-79"- Void.						
					7		@79"- Dry, med-dense, white, silt.						
		GP-5-6.9-7.5'			8		@83"- Moist, med-dense, dark grey, silty clay.						
					9		@86"- increasing moisture content						
					10		@90"-111"- Dry, grey, hard clay.						
					11		~100"- color changes to brown						
					12		@111"- moist, loose, grey & brown clayey f-sand.						
					13								
					14								
					15								
					16								
					17								
					18								
					19								
					20								

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: Sampled 6.9-7.5 ft, 10-11 ft, 20-22 ft

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.02
GEOLOGIST/ENGINEER: MM, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH: NA
HOLE DIAMETER: inches
BORING #: GP-5
DATE BEGAN: 10/26/20
DATE COMPLETED: 10/26/20
TOTAL DEPTH: 30 ft
PAGE: 2 OF 3
TIME: 1425
SAMPLING METHOD: in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		@120": Wet, loose, grey, silty f sand.						
					2		133"-135": pocket of clay.						
					3		@136": Moist, dense, brown, clay w/trace silt						
					4		165"-167" - pocket of sandy clay.						
					5		@229": 1" pocket of dark brown slightly silty f-sand						
					6		@231": Damp, loose, grey f-c sand w/ trace gravel.						
					7		@234-240" - void.						
					8		@240": wet, soft grey Sandy silt w/ moderate clay.						
					9		@246" - transitions to silty clay,						
					10		@251": SAA @ 240"						
							@264. Moist, loose, dark grey, M-Sand.						

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: sampled 6.9-7.5 ft, 10-11 ft, 20-22 ft

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 20200G-01.01
GEOLOGIST/ENGINEER: MM / DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH: N/A
HOLE DIAMETER: inches

BORING #: GP-5
DATE BEGAN: 10/26/20
DATE COMPLETED: 10/26/20
TOTAL DEPTH: 30 ft
PAGE: 3 OF 3
TIME: 1425
SAMPLING METHOD: in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		300"-312"- Void @312"- Moist, loose, grey silty sand. 320"-328"- Void @328- Damp, med-dense, grey f-c sand, trace gravel. @348"- Dry, med-dense, gravelly, f-c sand. @360"- end of boring.						
					2								
					3								
					4								
					5								
					6								
					7								
					8								
					9								
					10								
					11								
					12								
					13								
					14								
					15								
					16								
					17								
					18								
					19								
					20								

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: Sampled 6.9-7.5 ft, 10-11 ft, 20-22 ft

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005.01.01
GEOLOGIST/ENGINEER: MH, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH
HOLE DIAMETER inches
BORING # GP-6
DATE BEGAN 10.26.20
DATE COMPLETED 10.26.20
TOTAL DEPTH 30'
PAGE 1 OF 2
TIME 1615
SAMPLING METHOD in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	RECOVERY (ft recovered/ft driven)	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key)	GRVL %	SND %	FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
					1		0-18" Void						
					2		@ 18" - Moist, med-dense, grey, silty, gravelly f-sand.						
					3		@22" - Moist, med-dense, silty sand, trace gravel.						
					4		@24" - Dry, dense, light grey, f-c sandy silt.						
					5		@50" - Moist, stiff, black charcoaly clayey silt w/ moderate rusty colored sand.						
					6		@55 - Moist, stiff, black, silty clay.						
					7		@60" - Damp, med-stiff, brown silty, f-sand.						
					8		@69" - Dry, & stiff, brown clay						
					9		@111" - Moist, med-dense, grey gravelly, sand silt.						
					10		@118" - SAA @ 55"						

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: sampled 10.8 - 15 ft

GW also sampled, see GW 109

ANCHOR QEA

BORING LOG

CLIENT/PROJECT NAME: ABC Recycling
PROJECT NUMBER: 202005-01.01
GEOLOGIST/ENGINEER: MH, DP
DRILLING CONTRACTOR: AEC
DRILLING METHOD: Geoprobe
WATER DEPTH
HOLE DIAMETER inches
BORING # GP-6
DATE BEGAN 10.26.20
DATE COMPLETED 10.26.20
TOTAL DEPTH 30'
PAGE 2 OF 2
TIME 1615
SAMPLING METHOD in. by ft

SAMPLING METHOD	BLOW COUNTS (140-lb Hammer)	SAMPLING DATA: SAMPLE ID	SAMPLING DATA: RECOVERY (ft recovered/ft driven)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	Field location of boring / LITHOLOGIC DESCRIPTION (see key) GRVL % SND % FNS %	TORVANE (TSF): PEAK	TORVANE (TSF): RESIDUAL	POCKET PEN. (TSF)
		GP-6-10.8-15			1		@120-129"- Void			
					2		@129": Wet, loose, brown f-sand, trace silt.			
					3		144-148"- Void.			
					4		@148"- SAA @ 129"			
					5		@208- Moist, med-dense, brown, clayey f-sand.			
					6		@221 - Moist, med-stiff, grey clay.			
					7					
					8		277-280"- Diagonal contact transitions to wet, loose brown f-sand, trace silt			
					9					
					10		280"-293"- Void.			
					11		@293 - Wet, loose, brown f-sand, trace silt			
					12					
					13		@300- Dry, loose, grey gravelly f-c sand.			
					14		@317- Damp, stiff brown clay			
					15					
					16		@331 - transitions to grey			
					17		@346 - Wet, loose, grey, slightly clayey silt.			
					18		@352 - Interbedded layers of material @331 & 346"			
					19					
					20		@360 - End of boring.			

Remarks: No O = No Odor AOPP = As on Previous Page SAA = Same as above Δ = change

Notes: Sampled 10.8-15 Ft

GW also sampled, see GW log

GROUNDWATER SAMPLING DATA SHEET

ANCHOR QEA

720 Olive Way, Suite 1900
Seattle, Washington 98101
Office: 206.287.9130 Fax: 206.287.9131

PROJECT NAME: ABC Recycling WELL ID: GP-3-GW

SITE ADDRESS: 741 Marine Drive BLIND ID: NA

DUP ID: GP-3-GW-DUP NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 50.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
10/27/20	13:15	.	.	12.ft	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: 16.3'

Bottle Type	Date	Time	Method§	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	10/27/20	13:15	GRO	16	40 ml	HCl	(YES)	NO		✓
Amber Glass	10/27/20	13:15		14	250, 500, (1L)	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	10/27/20	13:15		3	250, 500, 1L	HNO_3	(YES)	(YES)		
Amber (G)	10/27/20	13:15		6	250, 500, 1L		YES			

Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) (8081A) 1613B 8082A
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 1300 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS/cm)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	B	1.5	6.53	1.281	13.3		0.34	Cloudy
2	B	1.0	6.60	1.299	13.3		0.45	Cloudy
1	B	0.5	6.70	1.318	13.4		0.66	Cloudy
0	B	0.00	6.99	1.329	13.5		4.65	Muddy brown

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Delaney Peterson
(PRINTED NAME)

(SIGNATURE)

GROUNDWATER SAMPLING DATA SHEET

ANCHOR QEA

720 Olive Way, Suite 1900
Seattle, Washington 98101
Office: 206.287.9130 Fax: 206.287.9131

PROJECT NAME: ABC Recycling **WELL ID:** GP-6

SITE ADDRESS: 741 Marine Drive **BLIND ID:** N/A

DUP ID: N/A NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		**TEMPERATURE:**	°F 47 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
10/26/20	17:50	.	.	8.5 ft	.	.	X 1	.
~~10/20/20~~	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: 12'

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	10/26/20	17:50	GRO	12	40 ml	HCl	(YES)	NO		✓
Amber Glass	10/26/20	17:50		6	250, 500, (1L)	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	~~10/26/20~~	~~17:50~~			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	~~10/26/20~~	~~17:50~~			~~250~~ 500, ~~1L~~	HNO_3	(YES)	NO		
Red Diss. Poly	10/26/20	17:50		1	~~250~~ 500, 1L	HNO_3	(YES)	(YES)		
~~AMBER~~ JARS	10/26/20	17:50		2	250, (500), 1L		YES			

Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-Gx)
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) (8081A) 16138 (8082A)
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Be) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 17:27 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp (°C)	Other	Diss O_2 (mg/l)	Water Quality
4	B	0.2	6.52	1.402	53.3		90.6099	
3	B	0.5	6.42	1.393	53.3		0.73	
2	B	0.75	6.39	1.392	53.3		0.64	
1		.	.		.		.	
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Delaney Peterson
(PRINTED NAME)

(SIGNATURE)

Chain of Custody Record & Laboratory Analysis Request

Laboratory Name: Onsite
Date: 10/20/2020
Project Name: ABC Recycling Phase 2
Project Number: 202005-01.01
Project Manager: Derek Ohmerod
Phone Number: 206-331-1738
Shipment Method: FedEx

ANCHOR QEA

Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	Test Parameters: Mercury /Metals	Total Solids/PAHs	Grain Size	Total Organic Carbon	Dioxin/Furans	Archive	TPHDx / ETPH	GRO	PCBs	TCLP metals	Comments/Preservation
1	TP-5-0-0.5	10/20/20 0957	S	7	X	X			X		X	X	X	X	DUP HOLD
2	TP-8-0-0.5	10/20/20 1150	S	7	X	X					X	X		(6)	
3	TP-8-2.5-3	10/20/20 1217	S	10	x	X			X		X	X	X		
4	TP-10-2-2.5	10/20/20 1435	S	7	X	X					X	X			
5	TP-10-2-2.5-DUP	10/20/20 1435	S	7	X	X					X	X			
6	TP-11-0-0.5	10/20/20 1512	S	7	x	X					X	X			
7	TP-11-1.5-2	10/20/20 1531	S	7	x	X					X	X			
8	TP-12-0-0.5	10/20/20 1608	S	10	X	X			X		X	X	X		
9	TP-12-3-3.5	10/20/20 1638	S	7	x	X					X	X			
10															
11															
12															
13															
14															
15															
16															
17															
18															

Notes: HOLD ALL SAMPLES UNTIL FURTHER INSTRUCTION PROVIDED

Relinquished By:	Company: Anchor QEA, LLC
Tanner Kamila	Tanner Kamila 10/20/20 1801
Signature/Printed Name	Date/Time

Received By:	Company:
Signature/Printed Name	Date/Time

Relinquished By:	Company:
Signature/Printed Name	Date/Time

Received By:	Company:
Signature/Printed Name	Date/Time

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Chain of Custody Record & Laboratory Analysis Request

Laboratory Name: OnSite
Date: 10/22/2020
Project Name: ABC Recycling Phase 2
Project Number: 202005-b.101
Project Manager: Derek Ormerod
Phone Number: 206-331-1738
Shipment Method: FedEx

ANCHOR QEA

Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	Mercury	Total Solids	Grain Size	Total Organic Carbon	Dioxin/Furans	Archive	TPHDx/ETPH	GRO	MS/MSD	PCBs	TCLP metals	Comments/Preservation
1	TP-9-0-0.5	10/21/2020 0837	S	4	X	X			X	X	X	X				HOLD
2	TP-7-4.5-5	10/21/2020 1016	S	4	X	X			X	X	X	X	X	X	X	MS/MSD
3	TP-4-0-0.5	10/21/2020 1111	S	4	X	X			X	X	X	X				
4	TP-4-3.5-4	10/21/2020 1133	S	4	X	X			X	X	X	X				
5	TP-6-0-0.5	10/21/2020 1213	S	4	X	X			X	X	X	X		X		
6	TP-16-0-0.5	10/21/2020 1410	S	4	X	X			X	X	X	X				
7	TP-16-5-5.5	10/21/2020 1527	S	3	X	X			X		X	X				
8	TP-13-1.5-2	10/22/2020 0837	S	4	X	X			X	X	X	X				
9	TP-17-1.5-2	10/22/2020 0926	S	4	X	X			X	X	X	X			X	
10	TP-15-1-1.5	10/22/2020 1010	S	4	X	X			X	X	X	X				
11	TP-14-1.5-2	10/22/2020 1034	S	4	X	X			X	X	X	X				
12	TP-1-0.5-1.5	10/22/2020 1145	S	4	X	X			X	X	X	X				
13	TP-2-1.5-2	10/22/2020 1214	S	4	X	X			X	X	X	X				
14	TP-3-1.5-2	10/22/2020 1256	S	4	X	X			X	X	X	X				
15																
16																
17																
18																

Test Parameters

Notes: Hold until further instruction provided

Relinquished By: Tanner Kamila — Company: Anchor QEA, LLC — Signature/Printed Name — Date/Time: 10/22/2020 1402

Received By: — Company: — Signature/Printed Name — Date/Time

Relinquished By: — Company: — Signature/Printed Name — Date/Time

Received By: — Company: — Signature/Printed Name — Date/Time

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Please analyze for the analyses indicated below.
JM for AQ 10.28.20

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Anchor QEA
Project Number: 202005-01.01
Project Name: ABC Recycling
Project Manager: Derek Ormerod
Sampled by: MH / DP

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number:

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals (6010C/7471A)	TCLP Metals	HEM (oil and grease) 1664A	Dioxin/furans MS/MSD		HOLD	% Moisture
	GP-2-8-9	10.26.20	1030	Soil	3			●	●					●	X					●			X			
	GP-2-14-20		1045		3			X	X					X	X					X			X		●	X
	GP-2-25-27		1050		3			●	●					●	X					●			X			
	GP-1-~~10-12.5~~ 5.7-9.7		1315		3			●	●					●	●					●	●		●			
	GP-1-10-12.3		1320		3			X	X					X	X					X			X		●	X
	GP-1-20-22		1330		3			●	●					●	X					●			X			
	GP-1-20-22-Dup		1331		3			●	●					●	X					●			X			
	GP-5-6.9-7.5		1515		3			●	●					●	X					●			X			
	GP-5-10-11		1525		3			X	X					X	X					X			X		●	X
	GP-5-20.22		1530		3			●	●					●	X					●			X	●		

	Signature	Company	Date	Time
Relinquished		Anchor QEA	10/28/20	0820
Received		Spreadly	10-28-20	0820
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Sb, As, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Th, Zn

Hold all samples pending further instructions.

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Anchor QEA
Project Number: 202005-01.01
Project Name: ABC Recycling
Project Manager: Derek Ormerod
Sampled by: MH / DP

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number:

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals (6 010C / 7471A)	TCLP Metals	HEM (oil and grease) 1664A	Dioxin/Furans	Diss. Metals (6010C/245.1)	MS/MSD	HOLD	% Moisture
	GP-6-10.8-15	10.26.20	1650	Soil	3			●	●					●	X					●			X				●
	GP-6-GW	↓	1750	GW	11			●	●					●	X								X	●			
	GP-4-7.8-8.7	10.27.20	1020	Soil	3			●	●					●	X					●			X				●
	GP-4-15-18.7		1030		3			●	●					●	X					●			X				●
	GP-3-12.7-13.4		1205		3			X	X					X	X					X			X			●	X
	GP-3-14.4-15.9		1215	↓	3			●	●					●	X					●			X				●
	GP-3-GW		1315	GW	23			●	●					●	X					*			X	●	●		
	GP-3-GW-Dup	↓	1320	↓	11			●	●					●	X					*	28		X	●			
	TB-201026	10.26.20	1015	W	2			●																			

	Signature	Company	Date	Time
Relinquished	[signature]	Anchor QEA	10/26/20	0820
Received	[signature]	Spreedy	10-26-20	0820
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Appendix B
Photograph Log

Photograph 1
TP-1

Photograph 2
TP-1

Photograph 3
TP-1

Photograph 4
TP-1

Photograph 5
TP-1

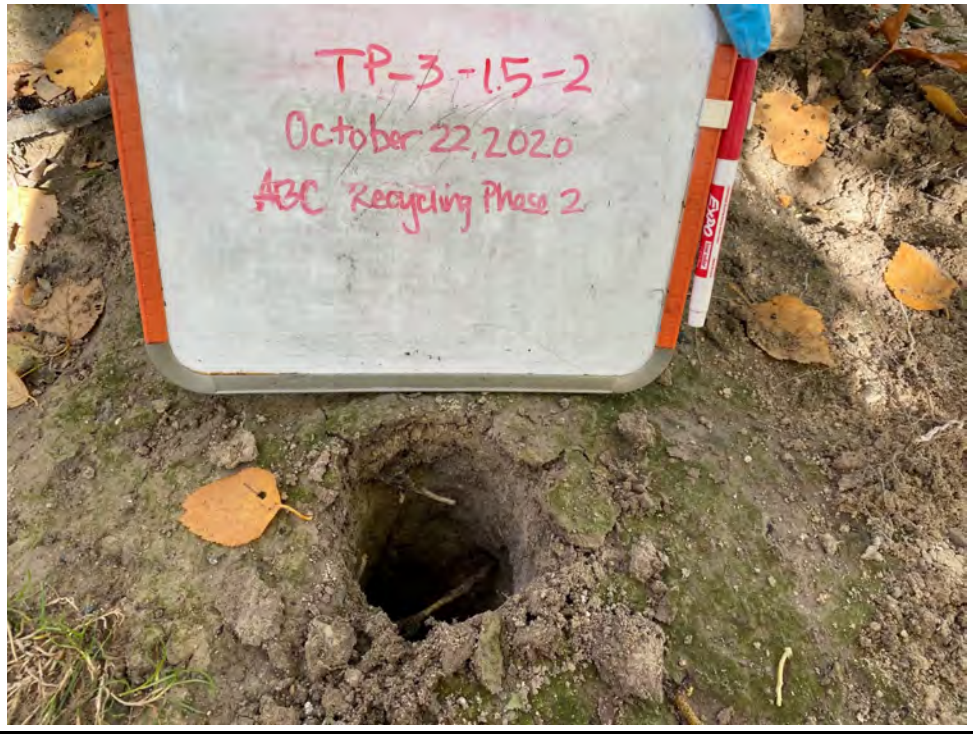
Photograph 6
TP-1

Photograph 7
TP-2

Photograph 8
TP-2

Photograph 9
TP-2

Photograph 10
TP-3



Photograph 11
TP-3

Photograph 12
TP-3

Photograph 13
TP-3

Photograph 14
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Photograph 15
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Photograph 16
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Photograph 17
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Photograph 19
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Photograph 20
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Photograph 21
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Photograph 22
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Photograph 23
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Photograph 36
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Photograph 37
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Photograph 38
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Photograph 39
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Photograph 43
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Photograph 44
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Photograph 45
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Photograph 46
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Photograph 47
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Photograph 50
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Photograph 51
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Photograph 52
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Photograph 55
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Photograph 58
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Photograph 59
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Photograph 60
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Photograph 61
TP-10

Photograph 62
TP-10

Photograph 63
TP-10

Photograph 64
TP-11

Photograph 65
TP-11

Photograph 66
TP-11

Photograph 67
TP-11

Photograph 68
TP-11

Photograph 69
TP-11

Photograph 70
TP-12

Photograph 71
TP-11

Photograph 72
TP-12

Photograph 73
TP-12

Photograph 74
TP-12

Photograph 75
TP-12

Photograph 76
TP-12

Photograph 77
TP-12

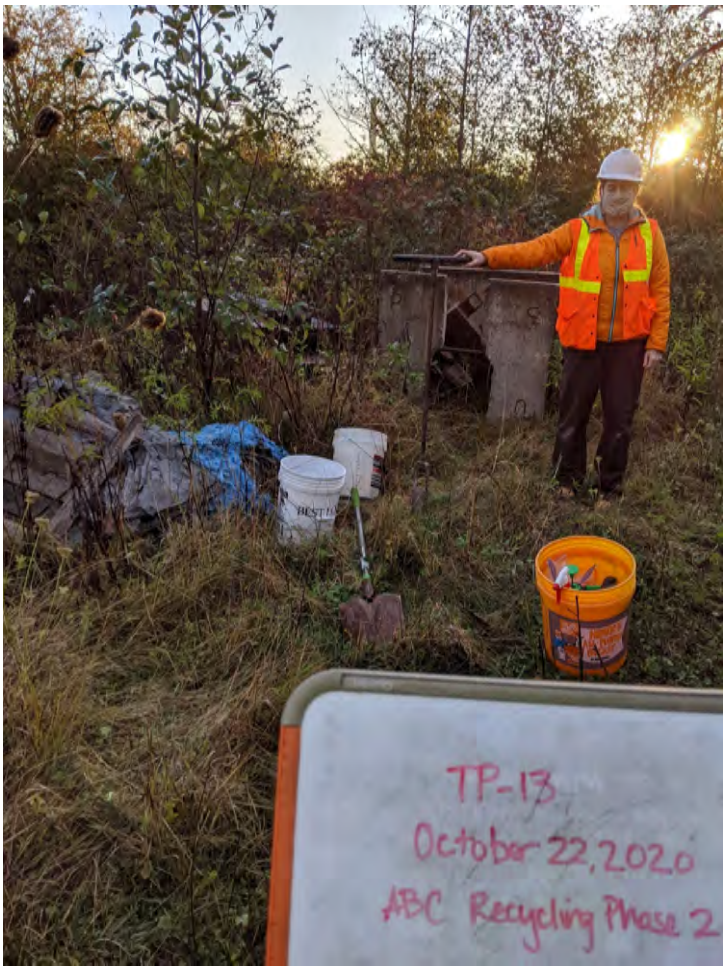
Photograph 78
TP-12

Photograph 79
TP-12

Photograph 80
TP-12

Photograph 81
TP-13

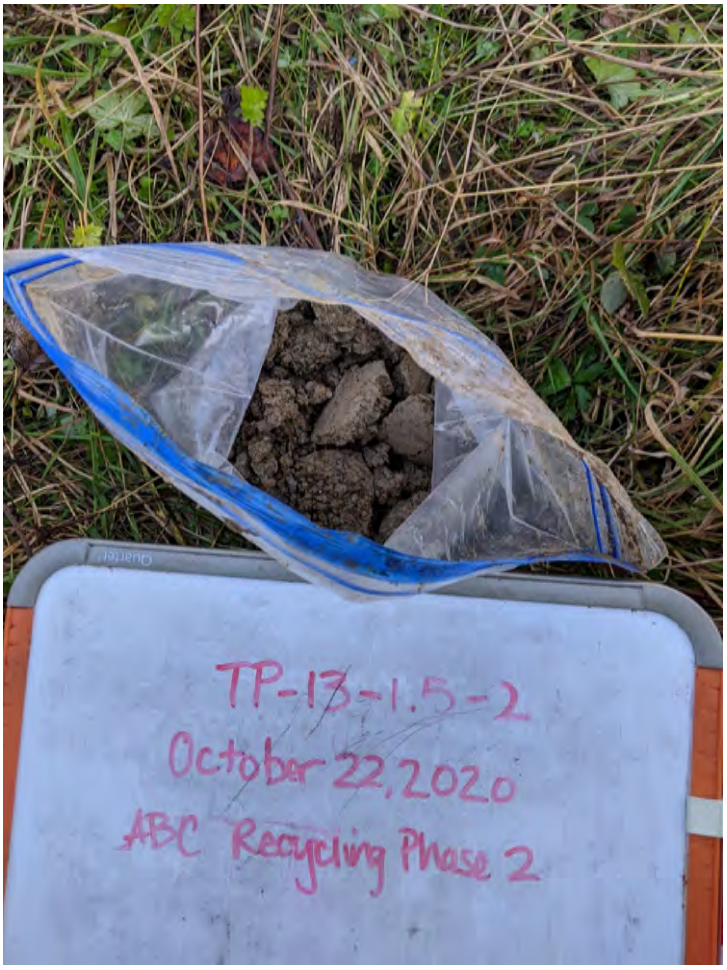
Photograph 82
TP-13



Photograph 83
TP-13

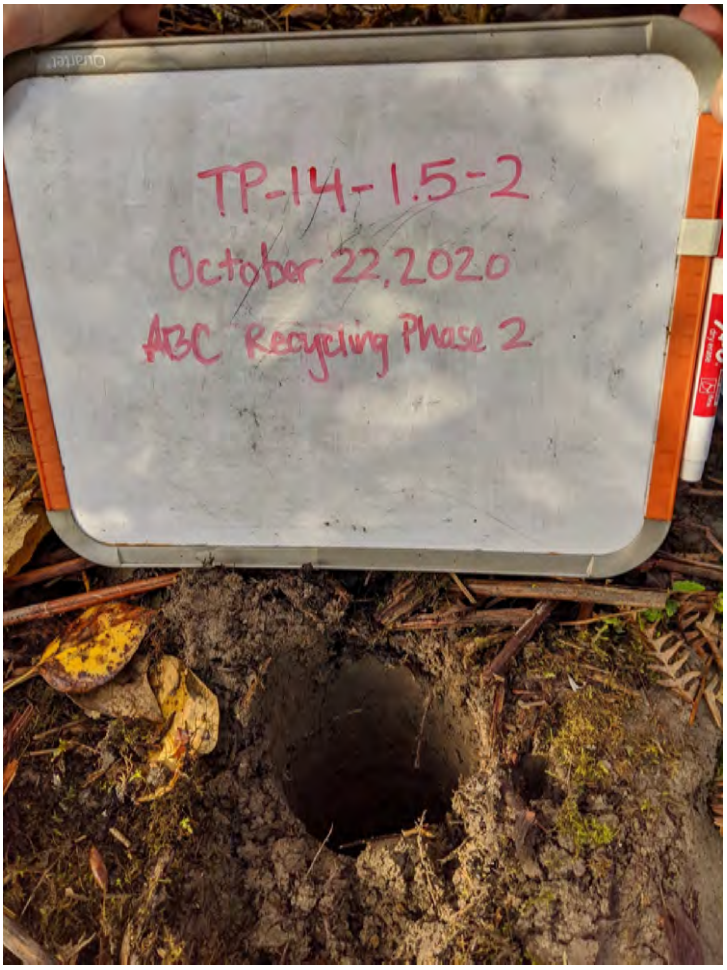
Photograph 84
TP-13

Photograph 85
TP-13



Photograph 86
TP-14

Photograph 87
TP-14



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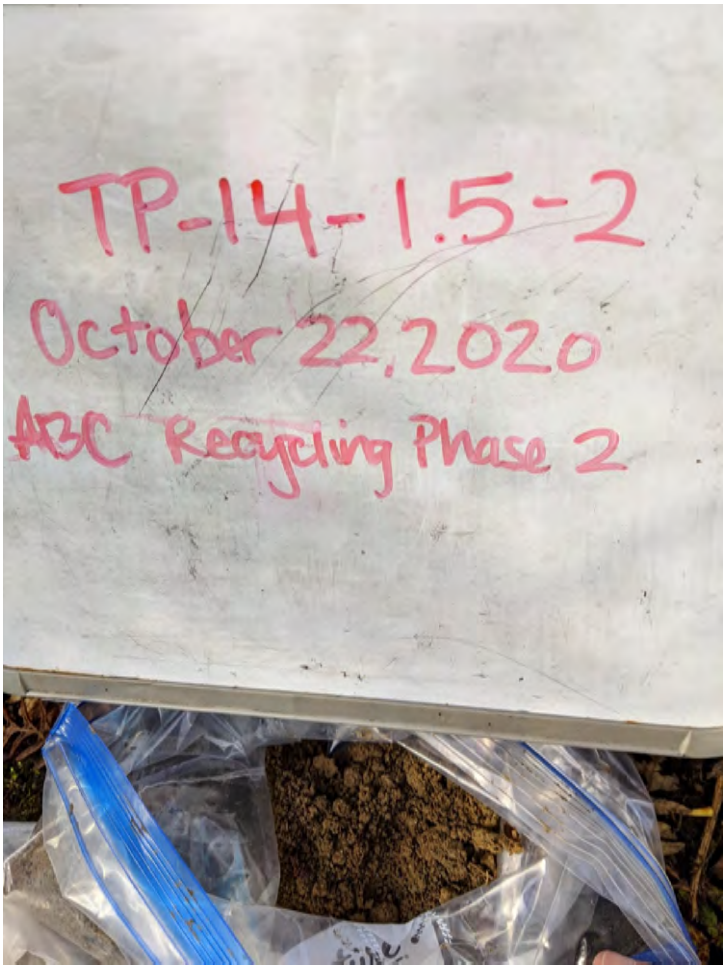
TP-14

Photograph 89
TP-14



Photograph 90
TP-15

Photograph 91
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Photograph 92
TP-15

Photograph 93
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Photograph 95
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Photograph 96
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Photograph 97
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Photograph 98
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Photograph 99
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Photograph 100
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Photograph 101
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Photograph 102
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Photograph 103
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Photograph 104
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Photograph 105
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Photograph 106
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Photograph 107
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Photograph 108
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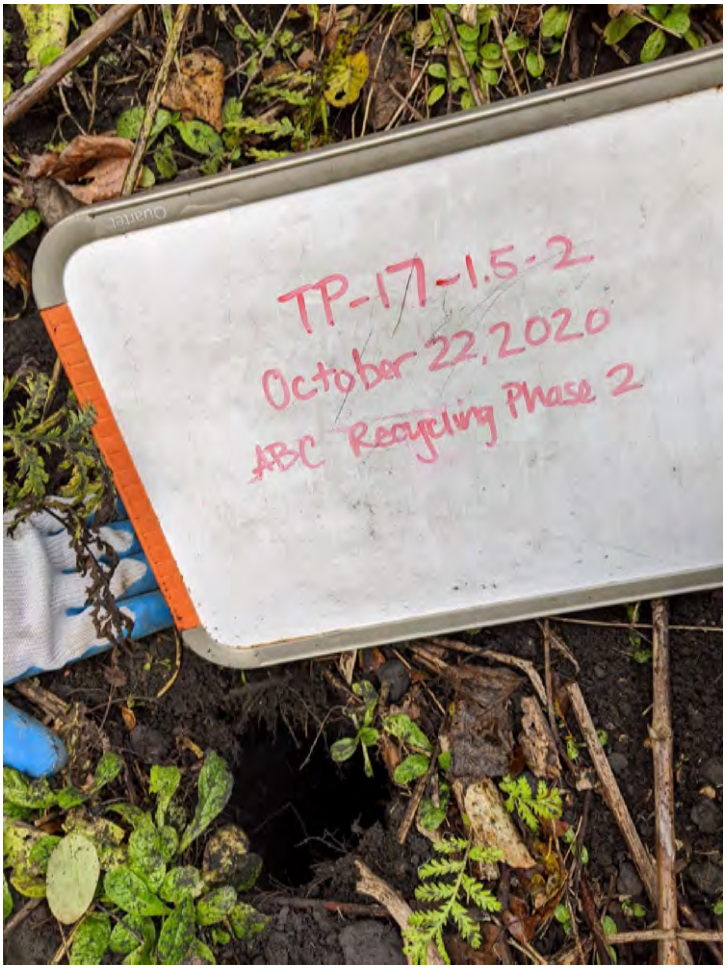
Photograph 109
TP-17



Photograph 110
GP-1

Photograph 111
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Photograph 112
GP-1

Photograph 113
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Photograph 114
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Photograph 115
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Photograph 116
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Photograph 139
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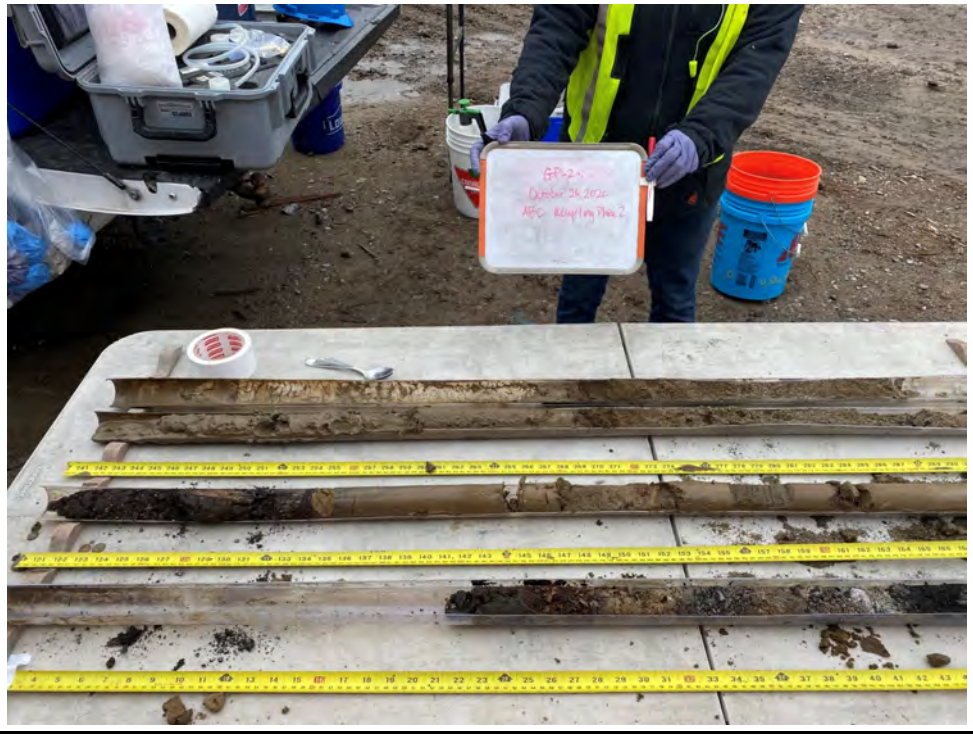
Photograph 140
GP-2



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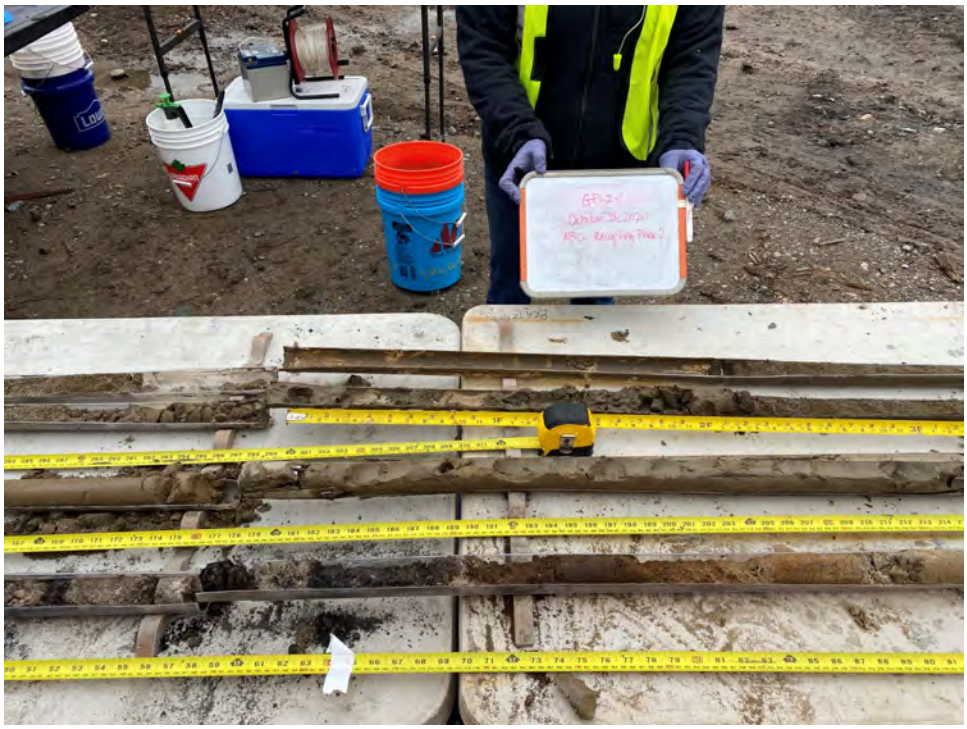
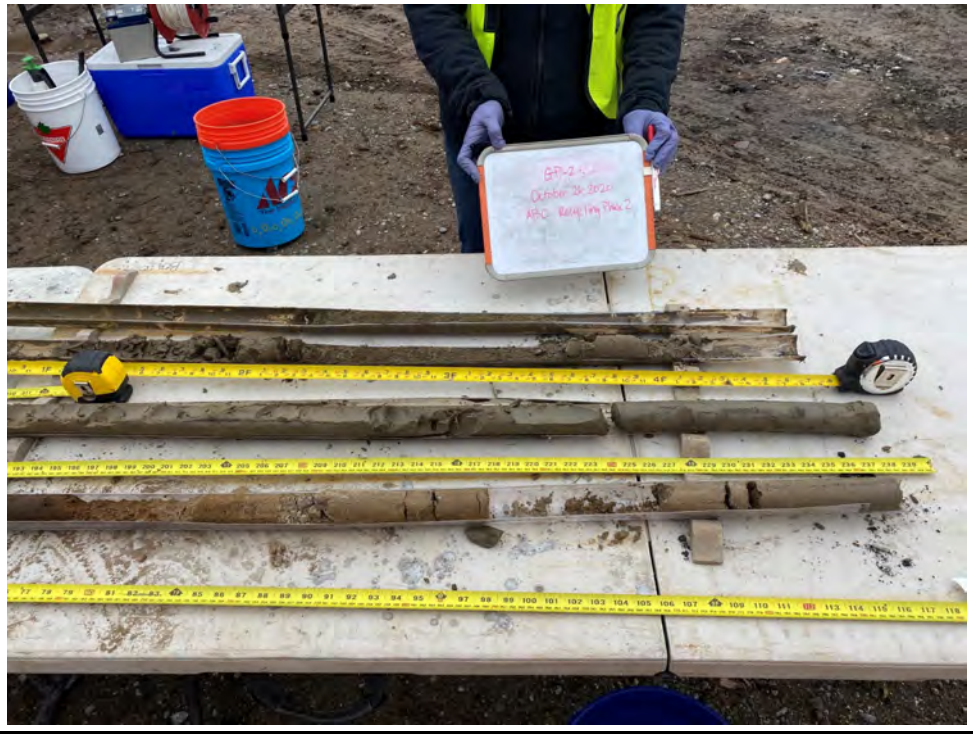
GP-2



Photograph 142
GP-2



Photograph 143
GP-3

Photograph 144
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Photograph 145
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Photograph 165
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Photograph 166
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Photograph 186
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Photograph 187
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Photograph 188
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Photograph 189
GP-6

Photograph 190
GP-6

Photograph 191
GP-6

Appendix C
Data Validation Report

1201 3rd Ave Suite 2600
Seattle, Washington 98101
206.287.9130

ANCHOR QEA

Data Validation Report – EPA Stage 2A

November 24, 2020

Project: Marine Drive Property

Project Number: 202005-01.01

This report summarizes the review of analytical results for 25 soil samples, two water samples, two duplicate samples, and one trip blank collected in October 2020. The samples were collected by Anchor QEA, LLC, and submitted to OnSite Environmental Inc. (OnSite) in Redmond, Washington. Aliquots of three soil samples were sent to Vista Analytical Laboratory (Vista) in El Dorado Hills, California. The following analytical parameter results were reviewed in this report:

- Diesel range organics (DRO), residual range organics (RRO) and gasoline range organics (GRO) by the Northwest Total Petroleum Hydrocarbons method for extended diesel (NWTPH-Dx) and gasoline (NWTPH-Gx) ranges
- Total metals by U.S. Environmental Protection Agency (USEPA) methods 6010D, 6020B, 200.8, 7470A, and 7471B
- Toxicity Characteristic Leaching Procedure (TCLP) metals by USEPA 1311
- Polycyclic aromatic hydrocarbons (PAHs) by USEPA method 8270E select ion monitoring
- Polychlorinated biphenyl (PCB) Aroclors by USEPA method 8082A
- Total solids (TS) by Standard Method 2540G
- Polychlorinated dibenzo-p-dioxins (PCDD)/dibenzofurans (PCDF) by USEPA method 1613B

OnSite sample delivery group numbers (SDGs) 2010-264, 2010-279, and 2010-327 were reviewed in this report. Sample IDs, matrices, and analyses are presented in Table 1.

Table 1
Sample IDs, SDGs, Matrices, and Analyses

Sample ID	Lab Sample ID	Matrix	Analyses
GP-1-20-22	2010-327-06	Soil	DRO, RRO, GRO, total metals, PAHs, TS
GP-1-20-22-DUP	2010-327-07	Soil	DRO, RRO, GRO, total metals, PAHs, TS
GP-1-5.7-9.7	2010-327-04	Soil	DRO, RRO, GRO, total and TCLP metals, PAHs, PCBs, TS, PCDD/PCDF
GP-2-25-27	2010-327-03	Soil	DRO, RRO, GRO, total metals, PAHs, TS
GP-2-8-9	2010-327-01	Soil	DRO, RRO, GRO, total metals, PAHs, TS
GP-3-14.4-15.9	2010-327-16	Soil	DRO, RRO, GRO, total metals, PAHs, TS
GP-3-GW	2010-327-17	Water	DRO, RRO, GRO, total metals, PAHs
GP-3-GW-DUP	2010-327-18	Water	DRO, RRO, GRO, total metals, PAHs

Sample ID	Lab Sample ID	Matrix	Analyses
GP-4-15-18.7	2010-327-14	Soil	DRO, RRO, GRO, total metals, PAHs, TS
GP-4-7.8-8.7	2010-327-13	Soil	DRO, RRO, GRO, total metals, PAHs, TS
GP-5-20-22	2010-327-10	Soil	DRO, RRO, GRO, total metals, PAHs, TS
GP-5-6.9-7.5	2010-327-08	Soil	DRO, RRO, GRO, total metals, PAHs, TS
GP-6-10.8-15	2010-327-11	Soil	DRO, RRO, GRO, total metals, PAHs, TS
GP-6-GW	2010-327-12	Water	DRO, RRO, GRO, total metals, PAHs
TB-201026	2010-327-19	Trip Blank	GRO
TP-1-0.5-1.5	2010-279-12	Soil	DRO, RRO, GRO, total metals, PAHs, TS
TP-12-0-0.5	2010-264-08	Soil	DRO, RRO, GRO, total metals, PAHs, TS
TP-13-1.5-2	2010-279-08	Soil	DRO, RRO, GRO, total metals, PAHs, TS
TP-14-1.5-2	2010-279-11	Soil	DRO, RRO, GRO, total metals, PAHs, TS
TP-15-1-1.5	2010-279-10	Soil	DRO, RRO, GRO, total metals, PAHs, TS
TP-16-5-5.5	2010-279-07	Soil	DRO, RRO, GRO, total metals, PAHs, TS
TP-17-1.5-2	2010-279-09	Soil	DRO, RRO, GRO, total and TCLP metals, PAHs
TP-2-1.5-2	2010-279-13	Soil	DRO, RRO, GRO, total metals, PAHs, TS
TP-3-1.5-2	2010-279-14	Soil	DRO, RRO, GRO, total metals, PAHs, TS
TP-4-0-0.5	2010-279-03	Soil	DRO, RRO, GRO, total metals, PAHs, TS
TP-5-0-0.5	2010-264-01	Soil	DRO, RRO, GRO, total and TCLP metals, PAHs, PCBs, TS, PCDD/PCDF
TP-6-0-0.5	2010-279-05	Soil	DRO, RRO, GRO, total metals, PAHs, PCBs, TS, PCDD/PCDF
TP-7-4.5-5	2010-279-02	Soil	DRO, RRO, GRO, total and TCLP metals, PAHs, PCBs, TS
TP-8-0-0.5	2010-264-02	Soil	DRO, RRO, GRO, total metals, PAHs, TS
TP-9-0-0.5	2010-279-01	Soil	DRO, RRO, GRO, total metals, PAHs, TS

Data Validation and Qualifications

The following comments refer to the laboratory's performance in meeting the quality assurance/quality control (QA/QC) guidelines outlined in the analytical procedures. Laboratory results were reviewed using the laboratory quality control limits and the following guidelines:

- ABC Recycling Phase II Environmental Assessment Sampling and Analysis Plan (SAP; Anchor QEA 2020)
- USEPA 1986 (SW-846, Third Edition), Test Methods for Evaluating Solid Waste: Physical/Chemical Methods
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA 2017a)
- National Functional Guidelines for Superfund Organic Methods Data Review (USEPA 2017b)

- National Functional Guidelines for High Resolution Superfund Methods Data Review (USEPA 2016)

Unless noted in this report, laboratory results for the samples listed above were within QC criteria.

Field Documentation

Field documentation was checked for completeness and accuracy. The chain-of-custody (COC) forms were signed by Onsite and Vista the time of sample receipt. Samples were received in good condition and within the recommended temperature range, with the exception of one cooler received at OnSite on October 22, 2020. The cooler temperature was 11°C and the laboratory did not note which samples were affected, so associated volatile or semivolatile results were qualified "J" or "UJ" to indicate a potentially low bias. Metal and PCB results are considered environmentally stable, so no data were qualified. Sample jars submitted for PCDD/PCDF analysis were clear glass. Amber glass jars are recommended for PCDD/PCDF analysis, however, since samples were stored at ≤ 6°C, in the dark, from the time of collection until extraction, no data were qualified.

Sample Preservation and Holding Times

Samples were appropriately preserved and analyzed within holding times.

Laboratory Method Blanks

Laboratory method blanks were analyzed at the required frequencies. Method blanks were free of target analytes.

Field Quality Control

Trip Blank

One trip blank was collected in association with the samples collected on October 26 and 27, 2020, and was free of target analytes. The samples collected on October 20, 21, and 22 did not have trip blanks associated with them; however, GRO was detected in only one sample so contamination during sample transport is unlikely and no data were qualified.

Field Duplicates

One soil and one groundwater field duplicate were collected in association with this sample set. The SAP requirement for field duplicates are one per 20 samples collected per matrix; however, only one soil duplicate was collected in association with 25 samples. A second duplicate was not analyzed due to laboratory error. Detected results are summarized in Table 2. Results that were less than five times the method reporting limit (MRL) were assessed by the difference between them instead of the relative percent difference (RPD) value. If a parent or field duplicate result was not detected and the

corresponding parent or duplicate result was detected, non-detected results were evaluated using the MRL.

Field duplicate RPD values were assessed using 50% RPD value as a control limit. Field duplicate difference values were assessed using plus or minus twice the MRL for soil samples and plus or minus the RL for water samples. All field duplicate RPD and difference values were within the control limits.

Table 2
Field Duplicates Summary

Analyte	GP-1-20-22	GP-1-20-22-DUP	RPD	Difference	Difference CL
Arsenic	6 mg/kg	6.3 mg/kg	--	0.3 mg/kg	7 mg/kg
Chromium	42 mg/kg	44 mg/kg	5%	--	--
Copper	35 mg/kg	35 mg/kg	0%	--	--
Nickel	46 mg/kg	46 mg/kg	0%	--	--
Zinc	64 mg/kg	62 mg/kg	3%	--	--
Beryllium	0.18 mg/kg	0.19 mg/kg	--	0.01 mg/kg	0.14 mg/kg
Cadmium	0.13 mg/kg	0.11 mg/kg	--	0.02 mg/kg	0.14 mg/kg
Lead	2 mg/kg	2 mg/kg	--	0 mg/kg	1.4 mg/kg
Mercury	0.037 mg/kg	0.045 mg/kg	--	0.008 mg/kg	0.028 mg/kg

Analyte	GP-3-GW	GP-3-GW-DUP	RPD	Difference	Difference CL
Arsenic	0.68 ug/L	0.56 ug/L	--	0.12 ug/L	0.5 ug/L
Nickel	13 ug/L	15 ug/L	14%	--	--
Selenium	1.4 ug/L	1.4 ug/L	--	0 ug/L	1 ug/L
Zinc	7 ug/L	6.6 ug/L	--	0.4 ug/L	2.5 ug/L
DRO	0.12 mg/L	0.11 mg/L	--	0.01 mg/L	0.1 mg/L
RRO	0.29 mg/L	0.27 mg/L	--	0.02 mg/L	0.2 mg/L
Benzo(b)fluoranthene	0.0056U ug/L	0.0053 ug/L	--	0.0003 ug/L	0.0056 ug/L

Notes:
CL = control limit
µg/kg = microgram per kilogram
mg/kg = milligram per kilogram
µg/L = microgram per liter
mg/L = milligram per liter

Surrogate and Labeled Compound Recoveries

Surrogates and labeled compounds were added to each sample as required by the method and recoveries were within laboratory control limits with one exception. The surrogate fluorobenzene recovered above the control limit in the GRO analysis of sample GP-2-25-27. GRO was not detected in the sample, so no data were qualified.

Laboratory Control and Laboratory Control Sample Duplicates

Laboratory control samples (LCS) and laboratory control sample duplicates (LCSD) were analyzed or matrix spike (MS) and matrix spike duplicate (MSD) samples were analyzed in place of LCS/LCSD samples, except for GRO, DRO and RRO. LCS/LCSD samples resulted in recoveries and/or RPD values within project control limits.

Ongoing Precision and Recovery Samples

Ongoing precision and recovery (OPR) samples were analyzed for PCDD/PCDF, and resulted in recoveries within project control limits.

Matrix Spike and Matrix Spike Duplicate Samples

Matrix spike (MS) and matrix spike duplicate (MSD) samples were analyzed at the required frequency, except for GRO, DRO and RRO. Recoveries and/or RPD values were within project-required control limits.

Laboratory Duplicates

Laboratory duplicates were analyzed at the required frequency, or MSD samples were analyzed in place of the duplicate. Sample or duplicate results that were less than five times the reporting limit were evaluated by the difference between them, using the control limit of plus or minus twice the MRL. Duplicate difference or RPD values were within control limits, with the following exceptions:

- SDG 2010-264 total metals: The duplicate RPD was above the project control limit for antimony, arsenic, and lead in the duplicate analyzed on sample TP-5-0-0.5. Antimony results were within five times the reporting limit, and the difference between them was less than two times the MRL so no data were qualified. Associated arsenic and lead results were qualified "J" to indicate they are estimated.
- SDG 2010-279 total metals: The duplicate RPD was above the project control limit for mercury in the duplicate analyzed on sample TP-7-4.5-5, however the sample and duplicate concentration were less than five times the MRL, and the difference between the results was less than two times the MRL, so no data were qualified.

Qualified results are summarized at the end of this report.

Estimated Maximum Potential Concentration

Some PCDD/PCDF results were qualified by the laboratory as estimated maximum potential concentration (EMPC). These results have been qualified "J" to indicate they are estimated.

Method Reporting Limits

Reporting limits were acceptable as reported. All values were reported using the laboratory limits and results below detection were reported to the MRL, except for PCDD/PCDF results, which were reported at the estimated detection limit. Values were reported as undiluted or when diluted, the detection and reporting limits reflect the dilution factor.

Overall Assessment

As was determined by this evaluation, the laboratory followed the specified analytical methods and all requested sample analyses were completed. Accuracy was acceptable as demonstrated by the surrogate, LCS/LCSD, and MS/MSD recovery values. Accuracy was evaluated using the surrogate percent recovery values for GRO, DRO, or RRO. Precision was acceptable as demonstrated by the LCS/LCSD, MS/MSD, laboratory and field duplicate RPD or difference values, with the exceptions noted above. All data are acceptable as reported or as qualified and no data were rejected. Table 3 summarizes the qualifiers applied to the sample results reviewed in this report.

Data Qualifier Definition

U Indicates the compound or analyte was analyzed for but not detected at or above the specified limit.

J Indicates an estimated value.

UJ Indicates the compound or analyte was analyzed for but not detected and the specified limit reported is estimated.

Table 3
Data Qualification Summary

Sample ID	Parameter	Analyte	Reported Result	Qualified Result	Reason
All samples in SDG 2010-264	GRO, DRO, RRO, PAH	All	Various	"J" detects "UJ" non-detects	Cooler temperature above 10°C
GP-1-5.7-9.7	PCDD/PCDF	Total HxCDD	1.38 EMPC ng/kg	1.38J ng/kg	EMPC
TP-12-0-0.5	Total metals	Arsenic	70 mg/kg	70J mg/kg	Duplicate RPD above control limit
		Lead	29 mg/kg	29J mg/kg	
TP-5-0-0.5	Total metals	Arsenic	20 mg/kg	20J mg/kg	Duplicate RPD above control limit
		Lead	90 mg/kg	90J mg/kg	
	PCDD/PCDF	2,3,7,8-TCDD	0.761EMPC ng/kg	0.761J ng/kg	EMPC
		Total TCDD	13.8 EMPC ng/kg	13.8J ng/kg	
		Total TCDF	17.6 EMPC ng/kg	17.6J ng/kg	

Sample ID	Parameter	Analyte	Reported Result	Qualified Result	Reason
TP-6-0-0.5	PCDD/PCDF	2,3,7,8-TCDD	0.0977 EMPC ng/kg	0.0977J ng/kg	EMPC
		1,2,3,4,7,8-HxCDD	0.812 EMPC ng/kg	0.812J ng/kg	
		Total TCDD	1.96 EMPC ng/kg	1.96J ng/kg	
		Total PeCDD	4.79 EMPC ng/kg	4.79J ng/kg	
		Total HxCDD	90.1 EMPC ng/kg	90.1J ng/kg	
		Total TCDF	0.690 EMPC ng/kg	0.690J ng/kg	
		Total PeCDF	4.32 EMPC ng/kg	4.32J ng/kg	
TP-8-0-0.5	Total metals	Arsenic	42 mg/kg	42J mg/kg	Duplicate RPD above control limit
		Lead	26 mg/kg	26J mg/kg	

Notes:
mg/kg = milligram per kilogram
MRL = method reporting limit
RPD = relative percent difference

References

Anchor QEA, 2020. Phase 2 Environmental Assessment Sampling and Analysis Plan. Prepared for ABC Recycling. October 2020.

USEPA (U.S. Environmental Protection Agency), 1986. Test methods for Evaluating Solid Waste: Physical/Chemical Methods. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. EPA-530/SW-846.

USEPA, 2016. National Functional Guidelines for High Resolution Superfund Methods Data Review. EPA 542-B-16-001. April 2016.

USEPA, 2017a. National Functional Guidelines for Inorganic Superfund Methods Data Review. Office of Superfund Remediation and Technology Innovation. United States Environmental Protection Agency. EPA-540-R-2017-001. January 2017.

USEPA, 2017b. National Functional Guidelines for Organic Superfund Methods Data Review. Office of Superfund Remediation and Technology Innovation. United States Environmental Protection Agency. EPA-540-R-2017-002. January 2017.

Appendix D
Laboratory Reports

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 17, 2020

Derek Ormerod
Anchor QEA
1201 3rd Ave, Suite 2600
Seattle, WA 98101

Re: Analytical Data for Project 202005-01.01
Laboratory Reference No. 2010-264

Dear Derek:

Enclosed are the analytical results and associated quality control data for samples submitted on October 22, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

Case Narrative

Samples were collected on October 20, 2020 and received by the laboratory on October 22, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

PCBs EPA 8082A Analysis

The Sample 10-279-02 was used as the MS/MSD pair. The RPD between the MS/MSD (26%) was above quality control limit of 15%. The sample was re-extracted and rerun with similar results and attributed to matrix effect. All other QC was within their corresponding quality control limits. No further action was performed.

Total Metals EPA 6010D/6020B/7471B Analysis

The duplicate RPD for Arsenic, Lead and Nickel is outside control limits due to sample inhomogeneity.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-5-0-0.5**					
Laboratory ID:	10-264-01					
Antimony	**6.0**	2.8	EPA 6010D	10-28-20	10-29-20	
Arsenic	**20**	2.8	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.23**	0.11	EPA 6020B	11-2-20	11-4-20	
Cadmium	**1.0**	0.11	EPA 6020B	11-2-20	11-4-20	
Chromium	**23**	0.56	EPA 6010D	10-28-20	10-29-20	
Copper	**44**	1.1	EPA 6010D	10-28-20	10-29-20	
Lead	**90**	5.6	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.47**	0.028	EPA 7471B	11-4-20	11-4-20	
Nickel	**21**	2.8	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	2.8	EPA 6010D	10-28-20	10-29-20	
Silver	**ND**	0.28	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	2.8	EPA 6010D	10-28-20	10-29-20	
Zinc	**210**	2.8	EPA 6010D	10-28-20	10-29-20	
Client ID:	**TP-8-0-0.5**					
Laboratory ID:	10-264-02					
Antimony	**16**	2.6	EPA 6010D	10-28-20	10-29-20	
Arsenic	**42**	2.6	EPA 6010D	10-28-20	10-29-20	
Beryllium	**ND**	0.11	EPA 6020B	11-2-20	11-4-20	
Cadmium	**0.76**	0.11	EPA 6020B	11-2-20	11-4-20	
Chromium	**9.1**	0.53	EPA 6010D	10-28-20	10-29-20	
Copper	**38**	1.1	EPA 6010D	10-28-20	10-29-20	
Lead	**26**	5.3	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.30**	0.026	EPA 7471B	11-4-20	11-4-20	
Nickel	**7.6**	2.6	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	2.6	EPA 6010D	10-28-20	10-29-20	
Silver	**ND**	0.26	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	2.6	EPA 6010D	10-28-20	10-29-20	
Zinc	**85**	2.6	EPA 6010D	10-28-20	10-29-20	

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-12-0-0.5**					
Laboratory ID:	10-264-08					
Antimony	**32**	2.7	EPA 6010D	10-28-20	10-29-20	
Arsenic	**70**	2.7	EPA 6010D	10-28-20	10-29-20	
Beryllium	**ND**	0.11	EPA 6020B	11-2-20	11-4-20	
Cadmium	**0.95**	0.11	EPA 6020B	11-2-20	11-4-20	
Chromium	**16**	0.54	EPA 6010D	10-28-20	10-29-20	
Copper	**89**	1.1	EPA 6010D	10-28-20	10-29-20	
Lead	**29**	5.4	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.26**	0.027	EPA 7471B	11-4-20	11-4-20	
Nickel	**13**	2.7	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	2.7	EPA 6010D	10-28-20	10-29-20	
Silver	**ND**	0.27	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	2.7	EPA 6010D	10-28-20	10-29-20	
Zinc	**100**	2.7	EPA 6010D	10-28-20	10-29-20	

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1028SH1					
Antimony	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Arsenic	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Chromium	**ND**	0.50	EPA 6010D	10-28-20	10-29-20	
Copper	**ND**	1.0	EPA 6010D	10-28-20	10-29-20	
Lead	**ND**	5.0	EPA 6010D	10-28-20	10-29-20	
Nickel	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Thallium	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Zinc	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Laboratory ID:	MB1102SM1					
Beryllium	**ND**	0.10	EPA 6020B	11-2-20	11-4-20	
Cadmium	**ND**	0.10	EPA 6020B	11-2-20	11-4-20	
Silver	**ND**	0.25	EPA 6020B	11-2-20	11-4-20	
Laboratory ID:	MB1104S1					
Mercury	**ND**	0.025	EPA 7471B	11-4-20	11-4-20	

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	10-264-01									
	ORIG	DUP								
Antimony	**5.35**	**9.10**	NA	NA		NA	NA	52	20	C
Arsenic	**17.7**	**26.3**	NA	NA		NA	NA	39	20	L
Chromium	**20.6**	**18.9**	NA	NA		NA	NA	9	20	
Copper	**38.9**	**43.8**	NA	NA		NA	NA	12	20	
Lead	**80.5**	**44.9**	NA	NA		NA	NA	57	20	L
Nickel	**18.5**	**14.9**	NA	NA		NA	NA	22	20	L
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Thallium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Zinc	**191**	**165**	NA	NA		NA	NA	15	20	
Laboratory ID:	10-264-01									
Beryllium	**0.204**	**0.191**	NA	NA		NA	NA	7	20	
Cadmium	**0.930**	**1.06**	NA	NA		NA	NA	13	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	10-264-01									
Mercury	**0.422**	**0.410**	NA	NA		NA	NA	3	20	
Laboratory ID:	10-279-02									
	ORIG	DUP								
Antimony	**6.30**	**7.95**	NA	NA		NA	NA	23	20	C
Arsenic	**18.0**	**20.0**	NA	NA		NA	NA	11	20	
Chromium	**18.2**	**19.9**	NA	NA		NA	NA	9	20	
Copper	**28.9**	**30.7**	NA	NA		NA	NA	6	20	
Lead	**28.2**	**33.5**	NA	NA		NA	NA	17	20	
Nickel	**16.2**	**17.1**	NA	NA		NA	NA	5	20	
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Thallium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Zinc	**104**	**124**	NA	NA		NA	NA	18	20	
Laboratory ID:	10-279-02									
Beryllium	**0.135**	**0.155**	NA	NA		NA	NA	14	20	
Cadmium	**2.16**	**2.04**	NA	NA		NA	NA	5	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	10-279-02									
Mercury	**0.0769**	**0.127**	NA	NA		NA	NA	49	20	C

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-279-02										
	MS	MSD	MS	MSD		MS	MSD				
Antimony	**88.0**	**83.5**	100	100	6.30	**82**	**77**	75-125	5	20	
Arsenic	**114**	**111**	100	100	18.0	**96**	**93**	75-125	3	20	
Chromium	**104**	**105**	100	100	18.2	**86**	**86**	75-125	0	20	
Copper	**80.5**	**76.0**	50.0	50.0	28.9	**103**	**94**	75-125	6	20	
Lead	**241**	**233**	250	250	28.2	**85**	**82**	75-125	3	20	
Nickel	**98.5**	**98.0**	100	100	16.2	**82**	**82**	75-125	1	20	
Selenium	**97.5**	**94.5**	100	100	ND	**98**	**95**	75-125	3	20	
Thallium	**44.4**	**43.9**	50.0	50.0	ND	**89**	**88**	75-125	1	20	
Zinc	**190**	**183**	100	100	104	**87**	**79**	75-125	4	20	
Laboratory ID:	10-279-02										
Beryllium	**49.8**	**51.3**	50.0	50.0	0.135	**99**	**102**	75-125	3	20	
Cadmium	**46.8**	**47.3**	50.0	50.0	2.16	**89**	**90**	75-125	1	20	
Silver	**22.5**	**22.3**	25.0	25.0	ND	**90**	**89**	75-125	1	20	
Laboratory ID:	10-279-02										
Mercury	**0.559**	**0.515**	0.500	0.500	0.0769	**96**	**88**	80-120	8	20	

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-5-0-0.5**					
Laboratory ID:	10-264-01					
Naphthalene	**0.51**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
2-Methylnaphthalene	**1.1**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
1-Methylnaphthalene	**0.73**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthylene	**0.078**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthene	**0.073**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Fluorene	**0.090**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Phenanthrene	**0.87**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Anthracene	**0.16**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Fluoranthene	**0.53**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Pyrene	**0.50**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]anthracene	**0.30**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Chrysene	**0.50**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[b]fluoranthene	**0.34**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo(j,k)fluoranthene	**0.092**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]pyrene	**0.14**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Indeno(1,2,3-c,d)pyrene	**0.096**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Dibenz[a,h]anthracene	**0.047**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[g,h,i]perylene	**0.12**	0.019	EPA 8270E/SIM	10-29-20	10-31-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*84*	*46 - 113*				
Pyrene-d10	*82*	*45 - 114*				
Terphenyl-d14	*86*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-8-0-0.5**					
Laboratory ID:	10-264-02					
Naphthalene	**0.015**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
2-Methylnaphthalene	**0.041**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
1-Methylnaphthalene	**0.023**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthylene	**ND**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthene	**0.0054**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Fluorene	**0.0080**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Phenanthrene	**0.066**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Anthracene	**0.0084**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Fluoranthene	**0.078**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Pyrene	**0.077**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]anthracene	**0.061**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Chrysene	**0.072**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[b]fluoranthene	**0.083**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo(j,k)fluoranthene	**0.020**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]pyrene	**0.053**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Indeno(1,2,3-c,d)pyrene	**0.040**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Dibenz[a,h]anthracene	**0.011**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[g,h,i]perylene	**0.043**	0.0035	EPA 8270E/SIM	10-29-20	10-31-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*64*	*46 - 113*				
Pyrene-d10	*79*	*45 - 114*				
Terphenyl-d14	*81*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-12-0-0.5**					
Laboratory ID:	10-264-08					
Naphthalene	**0.020**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
2-Methylnaphthalene	**0.056**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
1-Methylnaphthalene	**0.031**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthylene	**ND**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthene	**0.0042**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Fluorene	**0.011**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Phenanthrene	**0.058**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Anthracene	**ND**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Fluoranthene	**0.018**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Pyrene	**0.017**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]anthracene	**0.013**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Chrysene	**0.027**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[b]fluoranthene	**0.018**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo(j,k)fluoranthene	**ND**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]pyrene	**0.0086**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Indeno(1,2,3-c,d)pyrene	**0.0067**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Dibenz[a,h]anthracene	**ND**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[g,h,i]perylene	**0.0088**	0.0036	EPA 8270E/SIM	10-29-20	10-31-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*67*	*46 - 113*				
Pyrene-d10	*79*	*45 - 114*				
Terphenyl-d14	*76*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1029S2					
Naphthalene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
2-Methylnaphthalene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
1-Methylnaphthalene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthylene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Fluorene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Phenanthrene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Anthracene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Fluoranthene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Pyrene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]anthracene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Chrysene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[b]fluoranthene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo(j,k)fluoranthene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]pyrene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Dibenz[a,h]anthracene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[g,h,i]perylene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*75*	*46 - 113*				
Pyrene-d10	*83*	*45 - 114*				
Terphenyl-d14	*82*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-279-02										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	**0.120**	**0.121**	0.0833	0.0833	0.0558	77	78	51 - 115	1	26	
Acenaphthylene	**0.0623**	**0.0653**	0.0833	0.0833	0.00504	69	72	53 - 121	5	24	
Acenaphthene	**0.0677**	**0.0754**	0.0833	0.0833	0.00339	77	86	52 - 121	11	25	
Fluorene	**0.0644**	**0.0705**	0.0833	0.0833	0.00667	69	77	58 - 127	9	23	
Phenanthrene	**0.126**	**0.136**	0.0833	0.0833	0.0641	74	86	46 - 129	8	28	
Anthracene	**0.0732**	**0.0793**	0.0833	0.0833	0.0100	76	83	57 - 124	8	21	
Fluoranthene	**0.0877**	**0.0932**	0.0833	0.0833	0.0287	71	77	46 - 136	6	29	
Pyrene	**0.0859**	**0.0921**	0.0833	0.0833	0.0266	71	79	41 - 136	7	32	
Benzo[a]anthracene	**0.0983**	**0.114**	0.0833	0.0833	0.0191	95	114	56 - 136	15	25	
Chrysene	**0.0890**	**0.102**	0.0833	0.0833	0.0288	72	88	49 - 130	14	22	
Benzo[b]fluoranthene	**0.0813**	**0.0937**	0.0833	0.0833	0.0267	66	80	51 - 135	14	26	
Benzo(j,k)fluoranthene	**0.0686**	**0.0758**	0.0833	0.0833	0.00528	76	85	56 - 124	10	23	
Benzo[a]pyrene	**0.0728**	**0.0833**	0.0833	0.0833	0.0163	68	80	54 - 133	13	26	
Indeno(1,2,3-c,d)pyrene	**0.0727**	**0.0819**	0.0833	0.0833	0.0159	68	79	52 - 134	12	20	
Dibenz[a,h]anthracene	**0.0685**	**0.0791**	0.0833	0.0833	0.00596	75	88	58 - 127	14	17	
Benzo[g,h,i]perylene	**0.0763**	**0.0861**	0.0833	0.0833	0.0215	66	78	54 - 129	12	21	
Surrogate:											
2-Fluorobiphenyl						*62*	*67*	*46 - 113*			
Pyrene-d10						*70*	*77*	*45 - 114*			
Terphenyl-d14						*71*	*80*	*49 - 121*			

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-5-0-0.5**					
Laboratory ID:	10-264-01					
Diesel Range Organics	**56**	28	NWTPH-Dx	10-29-20	10-29-20	N
Lube Oil	**350**	56	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**TP-8-0-0.5**					
Laboratory ID:	10-264-02					
Diesel Range Organics	**ND**	26	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	53	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**TP-12-0-0.5**					
Laboratory ID:	10-264-08					
Diesel Range Organics	**ND**	27	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	55	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*90*	*50-150*				

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1029S2					
Diesel Range Organics	**ND**	25	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*96*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-264-01										
	ORIG	DUP									
Diesel Range Organics	**50.4**	**50.5**	NA	NA		NA		NA	0	NA	N
Lube Oil	**308**	**289**	NA	NA		NA		NA	6	NA	
Surrogate:											
o-Terphenyl						*97*	*91*	*50-150*			

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-5-0-0.5**					
Laboratory ID:	10-264-01					
Gasoline	**ND**	17	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*107*	*58-129*				
Client ID:	**TP-8-0-0.5**					
Laboratory ID:	10-264-02					
Gasoline	**ND**	6.3	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*58-129*				
Client ID:	**TP-12-0-0.5**					
Laboratory ID:	10-264-08					
Gasoline	**ND**	5.7	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*108*	*58-129*				

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

GASOLINE RANGE ORGANICS
NWTPH-Gx
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1028S3					
Gasoline	**ND**	5.0	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*58-129*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-264-01										
	ORIG	DUP									
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*107*	*108*	*58-129*			

Date of Report: November 17, 2020
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Laboratory Reference: 2010-264
Project: 202005-01.01

PCBs EPA 8082A

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-5-0-0.5**					
Laboratory ID:	10-264-01					
Aroclor 1016	**ND**	0.028	EPA 8082A	11-4-20	11-4-20	
Aroclor 1221	**ND**	0.028	EPA 8082A	11-4-20	11-4-20	
Aroclor 1232	**ND**	0.028	EPA 8082A	11-4-20	11-4-20	
Aroclor 1242	**ND**	0.028	EPA 8082A	11-4-20	11-4-20	
Aroclor 1248	**ND**	0.028	EPA 8082A	11-4-20	11-4-20	
Aroclor 1254	**ND**	0.028	EPA 8082A	11-4-20	11-4-20	
Aroclor 1260	**0.050**	0.028	EPA 8082A	11-4-20	11-4-20	
Aroclor 1262	**ND**	0.028	EPA 8082A	11-4-20	11-4-20	
Aroclor 1268	**ND**	0.028	EPA 8082A	11-4-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*91*	*46-125*				

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

PCBs EPA 8082A
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1104S1					
Aroclor 1016	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1221	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1232	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1242	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1248	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1254	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1260	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1262	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1268	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*98*	*46-125*				
Laboratory ID:	MB1104S1					
Aroclor 1016	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1221	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1232	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1242	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1248	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1254	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1260	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1262	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1268	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*97*	*46-125*				

Date of Report: November 17, 2020
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Project: 202005-01.01

PCBs EPA 8082A
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-279-02										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	**0.224**	**0.292**	0.250	0.250	ND	**89**	**117**	43-125	26	15	L, X
Surrogate:											
DCB						*102*	*102*	*46-125*			
SPIKE BLANKS											
Laboratory ID:	SB1104S1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	**0.280**	**0.260**	0.250	0.250	N/A	**112**	**104**	50-134	7	18	
Surrogate:											
DCB						*96*	*96*	*46-125*			
Laboratory ID:	SB1104S1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	**0.301**	**0.272**	0.250	0.250	N/A	**120**	**109**	50-134	10	18	X
Surrogate:											
DCB						*102*	*101*	*46-125*			

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

TCLP METALS
EPA 1311/6010D/7470A

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-5-0-0.5**					
Laboratory ID:	10-264-01					
Arsenic	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Barium	**0.45**	0.20	EPA 6010D	11-2-20	11-2-20	
Cadmium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Chromium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Lead	**ND**	0.20	EPA 6010D	11-2-20	11-2-20	
Mercury	**ND**	0.0050	EPA 7470A	10-30-20	10-30-20	
Selenium	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.040	EPA 6010D	11-2-20	11-2-20	

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Project: 202005-01.01

TCLP METALS
EPA 1311/6010D/7470A
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1030TM2					
Arsenic	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Barium	**ND**	0.20	EPA 6010D	11-2-20	11-2-20	
Cadmium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Chromium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Lead	**ND**	0.20	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.040	EPA 6010D	11-2-20	11-2-20	
Laboratory ID:	MB1030T2					
Mercury	**ND**	0.0050	EPA 7470A	10-30-20	10-30-20	

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

TCLP METALS
EPA 1311/6010D/7470A
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	10-264-01									
	ORIG	DUP								
Arsenic	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Barium	**0.452**	**0.448**	NA	NA		NA	NA	1	20	
Cadmium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	10-264-01									
Mercury	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	10-279-02									
	ORIG	DUP								
Arsenic	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Barium	**0.462**	**0.462**	NA	NA		NA	NA	0	20	
Cadmium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	10-279-02									
Mercury	**ND**	**ND**	NA	NA		NA	NA	NA	20	
MATRIX SPIKES										
Laboratory ID:	10-279-02									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	**3.92**	**3.90**	4.00	4.00	ND	**98**	**98**	75-125	1	20
Barium	**4.29**	**4.30**	4.00	4.00	0.462	**96**	**96**	75-125	0	20
Cadmium	**1.82**	**1.81**	2.00	2.00	ND	**91**	**90**	75-125	1	20
Chromium	**3.80**	**3.78**	4.00	4.00	ND	**95**	**95**	75-125	1	20
Lead	**9.55**	**9.51**	10.0	10.0	ND	**96**	**95**	75-125	0	20
Selenium	**4.05**	**4.01**	4.00	4.00	ND	**101**	**100**	75-125	1	20
Silver	**0.960**	**0.968**	1.00	1.00	ND	**96**	**97**	75-125	1	20
Laboratory ID:	10-279-02									
Mercury	**0.0488**	**0.0486**	0.0500	0.0500	ND	**98**	**97**	75-125	0	20

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

TOTAL SOLIDS
SM 2540G

Matrix: Soil
Units: % Solids

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-5-0-0.5**					
Laboratory ID:	10-264-01					
Total Solids	**89**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-8-0-0.5**					
Laboratory ID:	10-264-02					
Total Solids	**95**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-12-0-0.5**					
Laboratory ID:	10-264-08					
Total Solids	**92**	0.50	SM 2540G	10-29-20	10-30-20	

Date of Report: November 17, 2020
Samples Submitted: October 22, 2020
Laboratory Reference: 2010-264
Project: 202005-01.01

TOTAL SOLIDS
SM 2540G
QUALITY CONTROL

Matrix: Soil
Units: % Solids

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	10-264-01								
	ORIG	DUP							
Total Solids	**89.3**	**91.7**	NA	NA	NA	NA	3	20	

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

November 17, 2020

Vista Work Order No. 2002336

Mr. David Baumeister
OnSite Environmental Inc.
14648 NE 95th Street
Redmond, WA 98052

Dear Mr. Baumeister,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on October 28, 2020 under your Project Name '202005-0101'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier
Laboratory Director

Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Work Order No. 2002336
Case Narrative

Sample Condition on Receipt:

One solid sample was received and stored securely in accordance with Vista standard operating procedures and EPA methodology. The sample was received in good condition and within the method temperature requirements. The sample was received in a clear glass jar.

Analytical Notes:

EPA Method 1613B

The sample was extracted and analyzed for tetra-through-octa chlorinated dioxins and furans by EPA Method 1613B using a ZB-5MS GC column.

Holding Times

The sample was extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank. The OPR recoveries were within the method acceptance criteria.

Labeled standard recoveries for all QC and field samples were within method acceptance criteria.

TABLE OF CONTENTS

Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2002336-01	TP-5-0-0.5	20-Oct-20 09:57	28-Oct-20 09:49	Clear Glass Jar, 250mL

ANALYTICAL RESULTS

Sample ID: Method Blank — EPA Method 1613B

Client Data
Name: OnSite Environmental Inc.
Project: 202005-0101
Matrix: Solid

Laboratory Data
Lab Sample: B0K0041-BLK1
QC Batch: B0K0041 Date Extracted: 05-Nov-20
Sample Size: 10.0 g Column: ZB-DIOXIN

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.0263			13-Nov-20 10:55	1
1,2,3,7,8-PeCDD	ND	0.0497			13-Nov-20 10:55	1
1,2,3,4,7,8-HxCDD	ND	0.0568			13-Nov-20 10:55	1
1,2,3,6,7,8-HxCDD	ND	0.0574			13-Nov-20 10:55	1
1,2,3,7,8,9-HxCDD	ND	0.0721			13-Nov-20 10:55	1
1,2,3,4,6,7,8-HpCDD	ND	0.0573			13-Nov-20 10:55	1
OCDD	ND	0.116			13-Nov-20 10:55	1
2,3,7,8-TCDF	ND	0.0198			13-Nov-20 10:55	1
1,2,3,7,8-PeCDF	ND	0.0288			13-Nov-20 10:55	1
2,3,4,7,8-PeCDF	ND	0.0235			13-Nov-20 10:55	1
1,2,3,4,7,8-HxCDF	ND	0.0329			13-Nov-20 10:55	1
1,2,3,6,7,8-HxCDF	ND	0.0337			13-Nov-20 10:55	1
2,3,4,6,7,8-HxCDF	ND	0.0389			13-Nov-20 10:55	1
1,2,3,7,8,9-HxCDF	ND	0.0698			13-Nov-20 10:55	1
1,2,3,4,6,7,8-HpCDF	ND	0.0487			13-Nov-20 10:55	1
1,2,3,4,7,8,9-HpCDF	ND	0.0568			13-Nov-20 10:55	1
OCDF	ND	0.0915			13-Nov-20 10:55	1
Toxic Equivalent						
TEQMinWHO2005Dioxin	0.00					
Totals						
Total TCDD	ND	0.0263				
Total PeCDD	ND	0.0497				
Total HxCDD	ND	0.0721				
Total HpCDD	ND	0.0573				
Total TCDF	ND	0.0198				
Total PeCDF	ND	0.0288				
Total HxCDF	ND	0.0698				
Total HpCDF	ND	0.0568				

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	80.4	25 - 164		13-Nov-20 10:55	1
13C-1,2,3,7,8-PeCDD	IS	81.8	25 - 181		13-Nov-20 10:55	1
13C-1,2,3,4,7,8-HxCDD	IS	88.4	32 - 141		13-Nov-20 10:55	1
13C-1,2,3,6,7,8-HxCDD	IS	89.3	28 - 130		13-Nov-20 10:55	1
13C-1,2,3,7,8,9-HxCDD	IS	80.0	32 - 141		13-Nov-20 10:55	1
13C-1,2,3,4,6,7,8-HpCDD	IS	80.0	23 - 140		13-Nov-20 10:55	1
13C-OCDD	IS	74.4	17 - 157		13-Nov-20 10:55	1
13C-2,3,7,8-TCDF	IS	83.2	24 - 169		13-Nov-20 10:55	1
13C-1,2,3,7,8-PeCDF	IS	84.6	24 - 185		13-Nov-20 10:55	1
13C-2,3,4,7,8-PeCDF	IS	90.3	21 - 178		13-Nov-20 10:55	1
13C-1,2,3,4,7,8-HxCDF	IS	82.0	26 - 152		13-Nov-20 10:55	1
13C-1,2,3,6,7,8-HxCDF	IS	82.7	26 - 123		13-Nov-20 10:55	1
13C-2,3,4,6,7,8-HxCDF	IS	83.8	28 - 136		13-Nov-20 10:55	1
13C-1,2,3,7,8,9-HxCDF	IS	71.1	29 - 147		13-Nov-20 10:55	1
13C-1,2,3,4,6,7,8-HpCDF	IS	75.5	28 - 143		13-Nov-20 10:55	1
13C-1,2,3,4,7,8,9-HpCDF	IS	71.1	26 - 138		13-Nov-20 10:55	1
13C-OCDF	IS	71.5	17 - 157		13-Nov-20 10:55	1
37Cl-2,3,7,8-TCDD	CRS	95.5	35 - 197		13-Nov-20 10:55	1

EDL - Sample specifc estimated detection limit
EMPC - Estimated maximum possible concentration

The results are reported in dry weight.
The sample size is reported in wet weight.

Sample ID: OPR **EPA Method 1613B**

Client Data
Name: OnSite Environmental Inc.
Project: 202005-0101
Matrix: Solid

Laboratory Data
Lab Sample: B0K0041-BS1
QC Batch: B0K0041 Date Extracted: 05-Nov-20 06:05
Sample Size: 10.0 g Column: ZB-DIOXIN

Analyte	Amt Found (pg/g)	Spike Amt	% Recovery	Limits	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	21.0	20.0	105	67-158		13-Nov-20 09:25	1
1,2,3,7,8-PeCDD	106	100	106	70-142		13-Nov-20 09:25	1
1,2,3,4,7,8-HxCDD	101	100	101	70-164		13-Nov-20 09:25	1
1,2,3,6,7,8-HxCDD	104	100	104	76-134		13-Nov-20 09:25	1
1,2,3,7,8,9-HxCDD	103	100	103	64-162		13-Nov-20 09:25	1
1,2,3,4,6,7,8-HpCDD	102	100	102	70-140		13-Nov-20 09:25	1
OCDD	204	200	102	78-144		13-Nov-20 09:25	1
2,3,7,8-TCDF	19.4	20.0	96.8	75-158		13-Nov-20 09:25	1
1,2,3,7,8-PeCDF	102	100	102	80-134		13-Nov-20 09:25	1
2,3,4,7,8-PeCDF	102	100	102	68-160		13-Nov-20 09:25	1
1,2,3,4,7,8-HxCDF	103	100	103	72-134		13-Nov-20 09:25	1
1,2,3,6,7,8-HxCDF	101	100	101	84-130		13-Nov-20 09:25	1
2,3,4,6,7,8-HxCDF	100	100	100	70-156		13-Nov-20 09:25	1
1,2,3,7,8,9-HxCDF	98.9	100	98.9	78-130		13-Nov-20 09:25	1
1,2,3,4,6,7,8-HpCDF	103	100	103	82-122		13-Nov-20 09:25	1
1,2,3,4,7,8,9-HpCDF	100	100	100	78-138		13-Nov-20 09:25	1
OCDF	200	200	100	63-170		13-Nov-20 09:25	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	88.5	20-175		13-Nov-20 09:25	1
13C-1,2,3,7,8-PeCDD	IS	89.5	21-227		13-Nov-20 09:25	1
13C-1,2,3,4,7,8-HxCDD	IS	91.6	21-193		13-Nov-20 09:25	1
13C-1,2,3,6,7,8-HxCDD	IS	91.8	25-163		13-Nov-20 09:25	1
13C-1,2,3,7,8,9-HxCDD	IS	90.8	21-193		13-Nov-20 09:25	1
13C-1,2,3,4,6,7,8-HpCDD	IS	87.0	26-166		13-Nov-20 09:25	1
13C-OCDD	IS	79.6	13-199		13-Nov-20 09:25	1
13C-2,3,7,8-TCDF	IS	88.7	22-152		13-Nov-20 09:25	1
13C-1,2,3,7,8-PeCDF	IS	93.6	21-192		13-Nov-20 09:25	1
13C-2,3,4,7,8-PeCDF	IS	95.6	13-328		13-Nov-20 09:25	1
13C-1,2,3,4,7,8-HxCDF	IS	84.0	19-202		13-Nov-20 09:25	1
13C-1,2,3,6,7,8-HxCDF	IS	85.3	21-159		13-Nov-20 09:25	1
13C-2,3,4,6,7,8-HxCDF	IS	85.0	22-176		13-Nov-20 09:25	1
13C-1,2,3,7,8,9-HxCDF	IS	87.1	17-205		13-Nov-20 09:25	1
13C-1,2,3,4,6,7,8-HpCDF	IS	78.0	21-158		13-Nov-20 09:25	1
13C-1,2,3,4,7,8,9-HpCDF	IS	75.8	20-186		13-Nov-20 09:25	1
13C-OCDF	IS	77.7	13-199		13-Nov-20 09:25	1
37Cl-2,3,7,8-TCDD	CRS	106	31-191		13-Nov-20 09:25	1

Sample ID: TP-5-0-0.5

EPA Method 1613B

Client Data

Name:	OnSite Environmental Inc.
Project:	202005-0101
Matrix:	Solid
Date Collected:	20-Oct-20 09:57

Laboratory Data

Lab Sample:	2002336-01	Date Received:	28-Oct-20 09:49
QC Batch:	B0K0041	Date Extracted:	05-Nov-20
Sample Size:	11.6 g	Column:	ZB-DIOXIN
% Solids:	87.4		

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND		0.761		14-Nov-20 05:01	1
1,2,3,7,8-PeCDD	6.41				14-Nov-20 05:01	1
1,2,3,4,7,8-HxCDD	11.4				14-Nov-20 05:01	1
1,2,3,6,7,8-HxCDD	110				14-Nov-20 05:01	1
1,2,3,7,8,9-HxCDD	32.2				14-Nov-20 05:01	1
1,2,3,4,6,7,8-HpCDD	2350				14-Nov-20 05:01	1
OCDD	23400			D	14-Nov-20 16:24	20
2,3,7,8-TCDF	1.10				14-Nov-20 05:01	1
1,2,3,7,8-PeCDF	2.99				14-Nov-20 05:01	1
2,3,4,7,8-PeCDF	5.52				14-Nov-20 05:01	1
1,2,3,4,7,8-HxCDF	10.4				14-Nov-20 05:01	1
1,2,3,6,7,8-HxCDF	4.97				14-Nov-20 05:01	1
2,3,4,6,7,8-HxCDF	8.00				14-Nov-20 05:01	1
1,2,3,7,8,9-HxCDF	1.60			J	14-Nov-20 05:01	1
1,2,3,4,6,7,8-HpCDF	149				14-Nov-20 05:01	1
1,2,3,4,7,8,9-HpCDF	7.02				14-Nov-20 05:01	1
OCDF	433				14-Nov-20 05:01	1
Toxic Equivalent						
TEQMinWHO2005Dioxin	58.3					
Totals						
Total TCDD	12.9		13.8			
Total PeCDD	45.0					
Total HxCDD	669					
Total HpCDD	6130					
Total TCDF	17.2		17.6			
Total PeCDF	65.4					
Total HxCDF	264					
Total HpCDF	561					

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	98.5	25 - 164		14-Nov-20 05:01	1
13C-1,2,3,7,8-PeCDD	IS	98.7	25 - 181		14-Nov-20 05:01	1
13C-1,2,3,4,7,8-HxCDD	IS	96.6	32 - 141		14-Nov-20 05:01	1
13C-1,2,3,6,7,8-HxCDD	IS	97.6	28 - 130		14-Nov-20 05:01	1
13C-1,2,3,7,8,9-HxCDD	IS	97.3	32 - 141		14-Nov-20 05:01	1
13C-1,2,3,4,6,7,8-HpCDD	IS	115	23 - 140		14-Nov-20 05:01	1
13C-OCDD	IS	98.1	17 - 157	D	14-Nov-20 16:24	20
13C-2,3,7,8-TCDF	IS	99.3	24 - 169		14-Nov-20 05:01	1
13C-1,2,3,7,8-PeCDF	IS	103	24 - 185		14-Nov-20 05:01	1
13C-2,3,4,7,8-PeCDF	IS	105	21 - 178		14-Nov-20 05:01	1
13C-1,2,3,4,7,8-HxCDF	IS	93.3	26 - 152		14-Nov-20 05:01	1
13C-1,2,3,6,7,8-HxCDF	IS	92.2	26 - 123		14-Nov-20 05:01	1
13C-2,3,4,6,7,8-HxCDF	IS	92.9	28 - 136		14-Nov-20 05:01	1
13C-1,2,3,7,8,9-HxCDF	IS	95.2	29 - 147		14-Nov-20 05:01	1
13C-1,2,3,4,6,7,8-HpCDF	IS	91.3	28 - 143		14-Nov-20 05:01	1
13C-1,2,3,4,7,8,9-HpCDF	IS	98.6	26 - 138		14-Nov-20 05:01	1
13C-OCDF	IS	108	17 - 157		14-Nov-20 05:01	1
37Cl-2,3,7,8-TCDD	CRS	107	35 - 197		14-Nov-20 05:01	1

EDL - Sample specifc estimated detection limit
EMPC - Estimated maximum possible concentration

The results are reported in dry weight.
The sample size is reported in wet weight.

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
CRS	Cleanup Recovery Standard
D	Dilution
DL	Detection Limit
E	The associated compound concentration exceeded the calibration range of the instrument
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
IS	Internal Standard
J	The amount detected is below the Reporting Limit/LOQ
K	EMPC (specific projects only)
LOD	Limit of Detection
LOQ	Limit of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
MDL	Method Detection Limit
NA	Not applicable
ND	Not Detected
OPR	Ongoing Precision and Recovery sample
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
RL	Reporting Limit
TEQ	Toxic Equivalency
U	Not Detected (specific projects only)

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

Vista Analytical Laboratory Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	19-013-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-23
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2018017
Massachusetts Department of Environmental Protection	N/A
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	1521520
New Hampshire Environmental Accreditation Program	207718-B
New Jersey Department of Environmental Protection	190001
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-010
Pennsylvania Department of Environmental Protection	016
Texas Commission on Environmental Quality	T104704189-19-10
Vermont Department of Health	VT-4042
Virginia Department of General Services	10272
Washington Department of Ecology	C584-19
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	**Method**
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA TO-9A

MATRIX: Biological Tissue	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	**Method**
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613/1613B
1,4-Dioxane (1,4-Diethyleneoxide) analysis by GC/HRMS	EPA 522
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	ISO 25101 2009

MATRIX: Non-Potable Water	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	**Method**
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

2002336 2.3°C

OnSite Environmental Inc.

14648 NE 95th Street, Redmond, WA 98052 · (425) 883-3881

Laboratory Reference #: 10-264

Laboratory: Vista Analytical Laboratory

Turnaround Request

Project Manager: David Baumeister

Attention: Jennifer Miller

1 Day 2 Day 3 Day

email: dbaumeister@onsite-env.com

Address: 1104 Windfield Way, El Dorado Hills, CA 95762

Standard

Project Number: 202005-0101

Phone Number: (916) 673-1520

Other:

Project Name:

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	Requested Analyses
	TP-5-0-0.5	10/20/20	9:57	S	1	Dioxin/Furans

Signature	Company	Date	Time	Comments/Special Instructions
Relinquished by:	COSE	10/27/20	1600	CLIENT QA/QC
Received by:	UPS			
Relinquished by:	UPS			
Received by:	VAL	10/28/20	09:49	
Relinquished by:				
Received by:				

Vista Analytical Laboratory

Sample Log-In Checklist

Page # 1 of 1

Vista Work Order #: 2002336 TAT STD

Samples Arrival:	**Date/Time** 10/28/20 09:49		**Initials:**		**Location:** WR-2 **Shelf/Rack:** NA		
Delivered By:	FedEx	(UPS)	On Trac	GLS	DHL	Hand Delivered	Other
Preservation:	Ice		(Blue Ice)		Techni Ice	Dry Ice	None
Temp °C: 2.3 (uncorrected) **Temp °C:** 2.3 (corrected)			**Probe used: Y / (N)**			**Thermometer ID:** IR-4	

	YES	NO	NA
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?			X
Airbill — Trk # 1Z684E1W0195332127	✓		
Shipping Documentation Present?	✓		
Shipping Container: Vista / Client / Retain / (Return)			Dispose
Chain of Custody / Sample Documentation Present?	✓		
Chain of Custody / Sample Documentation Complete?	✓		
Holding Time Acceptable?	✓		

Logged In:	**Date/Time** 10/30/20 1041	**Initials:** VBB	**Location:** WR-2 **Shelf/Rack:**
COC Anomaly/Sample Acceptance Form completed?	✓		

Comments:

CoC/Label Reconciliation Report WO# 2002336

LabNumber	CoC Sample ID	SampleAlias	Sample Date/Time	Container	BaseMatrix	Sample Comments
2002336-01	A TP-5-0-0.5 (A) ☑		20-Oct-20 09:57 ☑	Clear Glass Jar, 250mL (B)	Solid	

Checkmarks indicate that information on the COC reconciled with the sample label.
Any discrepancies are noted in the following columns.

	Yes	No	NA
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Adequate Sample Volume?	✓		
Container Type Appropriate for Analysis(es)		✓	
Preservation Documented: Na2S2O3 Trizma None Other			✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Comments:

(A) Sample label Analysis "Metals"
(B) Sample rec'd in clear glass jar

Verifed by/Date: YBB 10/30/20

Vista Analytical Laboratory

ANOMALY FORM

Vista Work Order 2002336

Initial/Date		The following checked issues were noted during sample receipt and login:
_____	☐	**1. The samples were received out of temperature at (WI-PHT):** _____ Was Ice present: Yes No Melted Blue Ice
_____	☐	2. The Chain-of-Custody (CoC) was not relinquished properly.
_____	☐	3. The CoC did not include collection time(s). 00:00 will be used unless notified otherwise.
_____	☐	4. The sample(s) did not include a sample collection time. All or Sample Name: _____
_____	☐	5. A sample ID discrepancy was found. See the Reconciliation report. The CoC Sample ID will be used unless notified otherwise.
_____	☐	6. A sample date and/or time discrepancy was found. See the Reconciliation report. The CoC Sample date/time will be used unless notified otherwise.
_____	☐	**7. The CoC did not include a sample matrix. The following sample matrix will be used:** _____
_____	☐	**8. Insufficent volume received for analysis. All or Sample Name:** _____
_____	☐	9. The backup bottle was received broken. Sample Name: _____
_____	☐	**10. CoC not received, illegible or destroyed.**
_____	☐	**11. The sample(s) were received out of holding time. All or Sample Name:** _____
_____	☐	**12. The CoC did not include an analysis. All or Sample Name:** _____
_____	☐	**13. Sample(s) received without collection date. All or Sample Name:** _____
_____	☐	**14. Sample(s) not received. All or Sample Name:** _____
_____	☐	**15. Sample(s) received broken. All or Sample Name:** _____
NJB 10/30/20	☑	**16. An incorrect container-type was used. All or Sample Name:** TP-5-0-0.5 *
_____	☐	17. Other:

* Sample label analysis "Metals"

Bolded items require sign-off

Client Contacted: Yes, via email

Date of Contact: 10/30/2020

Vista Client Manager: KJR

Resolution: Client informed of container type in acknowledgement letter email

10-264

Chain of Custody Record & Laboratory Analysis Request

Laboratory Name: Onsite
Date: 10/20/2020
Project Name: ABC Recycling Phase 2
Project Number: 202005-01.01
Project Manager: Derek Ormerod/Matt Wolfman
Phone Number: 206-331-1738
Shipment Method: FedEx

Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	Test Parameters: Mercury / Metals (PP metals)	Total Solids / PAHs	Grain Size	Total Organic Carbon	Dioxin/Furans	Archive	TPHDx / ETPH DRO	GRO	PCBs	TCLP Metals (RCRA 8)	DUPLICATE	Total Solids 2540G	HOLD	Comments/Preservation
1	TP-5-0-0.5	10/20/20 0957	S	7	⊗	⊗			⊗		⊗	⊗	⊗	⊗	⊗	⊗		~~HOLD~~ DUPLICATE
2	TP-8-0-0.5	10/20/20 1150	S	7	⊗	⊗					⊗	⊗				⊗		
3	TP-8-2.5-3	10/20/20 1217	S	10	X	X			X		X	X	X	⊗			X	
4	TP-10-2-2.5	10/20/20 1435	S	7	X	X					X	X					X	
5	TP-10-2-2.5-DUP	10/20/20 1435	S	7	X	X					X	X					X	
6	TP-11-0-0.5	10/20/20 1512	S	7	X	X					X	X					X	
7	TP-11-1.5-2	10/20/20 1531	S	7	X	X					X	X					X	
8	TP-12-0-0.5	10/20/20 1638	S	10	⊗	⊗			X		⊗	⊗	X			⊗		
9	TP-12-3-3.5	10/20/20 1638	S	7	X	X					X	X					X	
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		

Notes: HOLD ALL SAMPLES UNTIL FURTHER INSTRUCTION PROVIDED
(X) Added 10/26/2020. DB (STA)

Relinquished By:	Company: Anchor QEA, LLC	Received By:	Company: OSE
Tanner Kamila 1801	Tanner Kamila 10/20/20	Matthew Stelle	10/22/20 1000
Signature/Printed Name	Date/Time	Signature/Printed Name	Date/Time
Relinquished By:	Company:	Received By:	Company:
Signature/Printed Name	Date/Time	Signature/Printed Name	Date/Time

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Sample/Cooler Receipt and Acceptance Checklist

Client: ANC

Client Project Name/Number: A 202005-01.01

OnSite Project Number: 10-264

Initiated by: VL

Date Initiated: 10/22/20

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	(No)	N/A	1 2 3 4	
1.2 Were the custody seals intact?	Yes	No	(N/A)	1 2 3 4	
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	(N/A)	1 2 3 4	
1.4 Were the samples delivered on ice or blue ice?	(Yes)	No	N/A	1 2 3 4	
1.5 Were samples received between 0-6 degrees Celsius?	(Yes)	(No)	N/A	Temperature:	11.4
1.6 Have shipping bills (if any) been attached to the back of this form?	(Yes)	N/A			
1.7 How were the samples delivered?	Client	Courier	UPS/FedEx	OSE Pickup	Other

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	(Yes)	No		1 2 3 4
2.2 Was the COC legible and written in permanent ink?	(Yes)	No		1 2 3 4
2.3 Have samples been relinquished and accepted by each custodian?	(Yes)	No		1 2 3 4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	Yes	(No)		1 2 3 4
2.5 Were all of the samples listed on the COC submitted?	(Yes)	No		1 2 3 4
2.6 Were any of the samples submitted omitted from the COC?	Yes	(No)		1 2 3 4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	(No)		1 2 3 4
3.2 Were any sample labels missing or illegible?	Yes	(No)		1 2 3 4
3.3 Have the correct containers been used for each analysis requested?	(Yes)	No		1 2 3 4
3.4 Have the samples been correctly preserved?	Yes	No	(N/A)	1 2 3 4
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	(N/A)	1 2 3 4
3.6 Is there sufficient sample submitted to perform requested analyses?	(Yes)	No		1 2 3 4
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	(No)		1 2 3 4
3.8 Was method 5035A used?	(Yes)	No	N/A	1 2 3 4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#2		N/A	1 2 3 4

Explain any discrepancies:

2.4 Sample TP-120-0.5 1 jar not labeled

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 17, 2020

Derek Ormerod
Anchor QEA
1201 3rd Ave, Suite 2600
Seattle, WA 98101

Re: Analytical Data for Project 202005-01.01
Laboratory Reference No. 2010-279

Dear Derek:

Enclosed are the analytical results and associated quality control data for samples submitted on October 23, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

Case Narrative

Samples were collected on October 21 and 22, 2020 and received by the laboratory on October 23, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

PCBs EPA 8082A Analysis

The Sample TP-7-4.5-5 was used as the MS/MSD pair. The RPD between the MS/MSD (26%) was above quality control limit of 15%. The sample was re-extracted and rerun with similar results and attributed to matrix effect. All other QC was within their corresponding quality control limits. No further action was performed.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-9-0-0.5**					
Laboratory ID:	10-279-01					
Antimony	**75**	2.6	EPA 6010D	10-28-20	10-29-20	
Arsenic	**160**	2.6	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.17**	0.11	EPA 6020B	11-2-20	11-4-20	
Cadmium	**0.47**	0.11	EPA 6020B	11-2-20	11-4-20	
Chromium	**74**	0.53	EPA 6010D	10-28-20	10-29-20	
Copper	**240**	1.1	EPA 6010D	10-28-20	10-29-20	
Lead	**110**	5.3	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.14**	0.026	EPA 7471B	11-4-20	11-4-20	
Nickel	**52**	13	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	2.6	EPA 6010D	10-28-20	10-29-20	
Silver	**0.41**	0.26	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	2.6	EPA 6010D	10-28-20	10-29-20	
Zinc	**280**	13	EPA 6010D	10-28-20	10-29-20	
Client ID:	**TP-7-4.5-5**					
Laboratory ID:	10-279-02					
Antimony	**8.8**	3.5	EPA 6010D	10-28-20	10-29-20	
Arsenic	**25**	3.5	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.19**	0.14	EPA 6020B	11-2-20	11-4-20	
Cadmium	**3.0**	0.14	EPA 6020B	11-2-20	11-4-20	
Chromium	**25**	0.69	EPA 6010D	10-28-20	10-29-20	
Copper	**40**	1.4	EPA 6010D	10-28-20	10-29-20	
Lead	**39**	6.9	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.11**	0.035	EPA 7471B	11-4-20	11-4-20	
Nickel	**22**	3.5	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	3.5	EPA 6010D	10-28-20	10-29-20	
Silver	**ND**	0.35	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	3.5	EPA 6010D	10-28-20	10-29-20	
Zinc	**140**	3.5	EPA 6010D	10-28-20	10-29-20	

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-4-0-0.5**					
Laboratory ID:	10-279-03					
Antimony	**46**	3.1	EPA 6010D	10-28-20	10-29-20	
Arsenic	**100**	3.1	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.36**	0.12	EPA 6020B	11-2-20	11-4-20	
Cadmium	**3.8**	0.12	EPA 6020B	11-2-20	11-4-20	
Chromium	**26**	0.62	EPA 6010D	10-28-20	10-29-20	
Copper	**90**	1.2	EPA 6010D	10-28-20	10-29-20	
Lead	**130**	6.2	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.25**	0.031	EPA 7471B	11-4-20	11-4-20	
Nickel	**17**	3.1	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	3.1	EPA 6010D	10-28-20	10-29-20	
Silver	**0.50**	0.31	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	3.1	EPA 6010D	10-28-20	10-29-20	
Zinc	**250**	3.1	EPA 6010D	10-28-20	10-29-20	
Client ID:	**TP-6-0-0.5**					
Laboratory ID:	10-279-05					
Antimony	**5.3**	2.8	EPA 6010D	10-28-20	10-29-20	
Arsenic	**19**	2.8	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.26**	0.11	EPA 6020B	11-2-20	11-4-20	
Cadmium	**1.6**	0.11	EPA 6020B	11-2-20	11-4-20	
Chromium	**11**	0.57	EPA 6010D	10-28-20	10-29-20	
Copper	**37**	1.1	EPA 6010D	10-28-20	10-29-20	
Lead	**15**	5.7	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.11**	0.028	EPA 7471B	11-4-20	11-4-20	
Nickel	**9.0**	2.8	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	2.8	EPA 6010D	10-28-20	10-29-20	
Silver	**ND**	0.28	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	2.8	EPA 6010D	10-28-20	10-29-20	
Zinc	**65**	2.8	EPA 6010D	10-28-20	10-29-20	

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-16-5-5.5**					
Laboratory ID:	10-279-07					
Antimony	**ND**	3.7	EPA 6010D	10-28-20	10-29-20	
Arsenic	**6.4**	3.7	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.52**	0.15	EPA 6020B	11-2-20	11-4-20	
Cadmium	**0.79**	0.15	EPA 6020B	11-2-20	11-4-20	
Chromium	**43**	0.74	EPA 6010D	10-28-20	10-29-20	
Copper	**30**	1.5	EPA 6010D	10-28-20	10-29-20	
Lead	**16**	7.4	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.048**	0.037	EPA 7471B	11-4-20	11-4-20	
Nickel	**41**	3.7	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	3.7	EPA 6010D	10-28-20	10-29-20	
Silver	**0.38**	0.37	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	3.7	EPA 6010D	10-28-20	10-29-20	
Zinc	**130**	3.7	EPA 6010D	10-28-20	10-29-20	
Client ID:	**TP-13-1.5-2**					
Laboratory ID:	10-279-08					
Antimony	**ND**	3.2	EPA 6010D	10-28-20	10-29-20	
Arsenic	**6.5**	3.2	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.34**	0.13	EPA 6020B	11-2-20	11-4-20	
Cadmium	**ND**	0.13	EPA 6020B	11-2-20	11-4-20	
Chromium	**50**	0.63	EPA 6010D	10-28-20	10-29-20	
Copper	**41**	1.3	EPA 6010D	10-28-20	10-29-20	
Lead	**3.9**	1.3	EPA 6020B	11-2-20	11-5-20	
Mercury	**0.051**	0.032	EPA 7471B	11-4-20	11-4-20	
Nickel	**48**	3.2	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	3.2	EPA 6010D	10-28-20	10-29-20	
Silver	**ND**	0.32	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	3.2	EPA 6010D	10-28-20	10-29-20	
Zinc	**64**	3.2	EPA 6010D	10-28-20	10-29-20	

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-17-1.5-2**					
Laboratory ID:	10-279-09					
Antimony	**ND**	4.1	EPA 6010D	10-28-20	10-29-20	
Arsenic	**13**	4.1	EPA 6010D	10-28-20	10-29-20	
Beryllium	**1.8**	0.16	EPA 6020B	11-2-20	11-4-20	
Cadmium	**0.71**	0.16	EPA 6020B	11-2-20	11-4-20	
Chromium	**16**	0.82	EPA 6010D	10-28-20	10-29-20	
Copper	**36**	1.6	EPA 6010D	10-28-20	10-29-20	
Lead	**31**	8.2	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.34**	0.041	EPA 7471B	11-4-20	11-4-20	
Nickel	**18**	4.1	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	4.1	EPA 6010D	10-28-20	10-29-20	
Silver	**ND**	0.41	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	4.1	EPA 6010D	10-28-20	10-29-20	
Zinc	**42**	4.1	EPA 6010D	10-28-20	10-29-20	
Client ID:	**TP-15-1-1.5**					
Laboratory ID:	10-279-10					
Antimony	**ND**	3.0	EPA 6010D	10-28-20	10-29-20	
Arsenic	**9.9**	3.0	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.34**	0.12	EPA 6020B	11-2-20	11-4-20	
Cadmium	**0.17**	0.12	EPA 6020B	11-2-20	11-4-20	
Chromium	**45**	0.60	EPA 6010D	10-28-20	10-29-20	
Copper	**43**	1.2	EPA 6010D	10-28-20	10-29-20	
Lead	**4.0**	1.2	EPA 6020B	11-2-20	11-5-20	
Mercury	**0.047**	0.030	EPA 7471B	11-4-20	11-4-20	
Nickel	**48**	3.0	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	3.0	EPA 6010D	10-28-20	10-29-20	
Silver	**ND**	0.30	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	3.0	EPA 6010D	10-28-20	10-29-20	
Zinc	**77**	3.0	EPA 6010D	10-28-20	10-29-20	

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TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-14-1.5-2**					
Laboratory ID:	10-279-11					
Antimony	**ND**	3.0	EPA 6010D	10-28-20	10-29-20	
Arsenic	**7.2**	3.0	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.29**	0.12	EPA 6020B	11-2-20	11-4-20	
Cadmium	**0.13**	0.12	EPA 6020B	11-2-20	11-4-20	
Chromium	**44**	0.60	EPA 6010D	10-28-20	10-29-20	
Copper	**27**	1.2	EPA 6010D	10-28-20	10-29-20	
Lead	**3.8**	1.2	EPA 6020B	11-2-20	11-5-20	
Mercury	**0.042**	0.030	EPA 7471B	11-4-20	11-4-20	
Nickel	**35**	3.0	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	3.0	EPA 6010D	10-28-20	10-29-20	
Silver	**ND**	0.30	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	3.0	EPA 6010D	10-28-20	10-29-20	
Zinc	**49**	3.0	EPA 6010D	10-28-20	10-29-20	
Client ID:	**TP-1-0.5-1.5**					
Laboratory ID:	10-279-12					
Antimony	**3.4**	3.2	EPA 6010D	10-28-20	10-29-20	
Arsenic	**11**	3.2	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.37**	0.13	EPA 6020B	11-2-20	11-4-20	
Cadmium	**0.44**	0.13	EPA 6020B	11-2-20	11-4-20	
Chromium	**28**	0.65	EPA 6010D	10-28-20	10-29-20	
Copper	**17**	1.3	EPA 6010D	10-28-20	10-29-20	
Lead	**14**	6.5	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.039**	0.032	EPA 7471B	11-4-20	11-4-20	
Nickel	**27**	3.2	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	3.2	EPA 6010D	10-28-20	10-29-20	
Silver	**ND**	0.32	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	3.2	EPA 6010D	10-28-20	10-29-20	
Zinc	**98**	3.2	EPA 6010D	10-28-20	10-29-20	

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TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-2-1.5-2**					
Laboratory ID:	10-279-13					
Antimony	**ND**	3.2	EPA 6010D	10-28-20	10-29-20	
Arsenic	**11**	3.2	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.49**	0.13	EPA 6020B	11-2-20	11-4-20	
Cadmium	**ND**	0.13	EPA 6020B	11-2-20	11-4-20	
Chromium	**64**	0.65	EPA 6010D	10-28-20	10-29-20	
Copper	**53**	1.3	EPA 6010D	10-28-20	10-29-20	
Lead	**6.9**	6.5	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.067**	0.032	EPA 7471B	11-4-20	11-4-20	
Nickel	**58**	3.2	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	3.2	EPA 6010D	10-28-20	10-29-20	
Silver	**ND**	0.32	EPA 6020B	11-2-20	11-4-20	
Thallium	**ND**	3.2	EPA 6010D	10-28-20	10-29-20	
Zinc	**87**	3.2	EPA 6010D	10-28-20	10-29-20	
Client ID:	**TP-3-1.5-2**					
Laboratory ID:	10-279-14					
Antimony	**26**	5.1	EPA 6010D	10-28-20	10-29-20	
Arsenic	**93**	5.1	EPA 6010D	10-28-20	10-29-20	
Beryllium	**0.25**	0.20	EPA 6020B	11-2-20	11-4-20	
Cadmium	**79**	0.20	EPA 6020B	11-2-20	11-4-20	
Chromium	**28**	1.0	EPA 6010D	10-28-20	10-29-20	
Copper	**59**	2.0	EPA 6010D	10-28-20	10-29-20	
Lead	**2600**	10	EPA 6010D	10-28-20	10-29-20	
Mercury	**0.25**	0.051	EPA 7471B	11-4-20	11-4-20	
Nickel	**8.1**	5.1	EPA 6010D	10-28-20	10-29-20	
Selenium	**30**	5.1	EPA 6010D	10-28-20	10-29-20	
Silver	**11**	0.51	EPA 6020B	11-2-20	11-4-20	
Thallium	**8.9**	5.1	EPA 6010D	10-28-20	10-29-20	
Zinc	**290**	5.1	EPA 6010D	10-28-20	10-29-20	

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TOTAL METALS
EPA 6010D/6020B/7471B
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1102SM1					
Lead	**ND**	1.0	EPA 6020B	11-2-20	11-5-20	
Laboratory ID:	MB1028SH1					
Antimony	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Arsenic	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Chromium	**ND**	0.50	EPA 6010D	10-28-20	10-29-20	
Copper	**ND**	1.0	EPA 6010D	10-28-20	10-29-20	
Lead	**ND**	5.0	EPA 6010D	10-28-20	10-29-20	
Nickel	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Selenium	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Thallium	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Zinc	**ND**	2.5	EPA 6010D	10-28-20	10-29-20	
Laboratory ID:	MB1102SM1					
Beryllium	**ND**	0.10	EPA 6020B	11-2-20	11-4-20	
Cadmium	**ND**	0.10	EPA 6020B	11-2-20	11-4-20	
Silver	**ND**	0.25	EPA 6020B	11-2-20	11-4-20	
Laboratory ID:	MB1104S1					
Mercury	**ND**	0.025	EPA 7471B	11-4-20	11-4-20	

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TOTAL METALS
EPA 6010D/6020B/7471B
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	10-279-02									
	ORIG	DUP								
Antimony	**6.30**	**7.95**	NA	NA		NA	NA	23	20	
Arsenic	**18.0**	**20.0**	NA	NA		NA	NA	11	20	
Chromium	**18.2**	**19.9**	NA	NA		NA	NA	9	20	
Copper	**28.9**	**30.7**	NA	NA		NA	NA	6	20	
Lead	**28.2**	**33.5**	NA	NA		NA	NA	17	20	
Nickel	**16.2**	**17.1**	NA	NA		NA	NA	5	20	
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Thallium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Zinc	**104**	**124**	NA	NA		NA	NA	18	20	
Laboratory ID:	10-279-02									
Beryllium	**0.135**	**0.155**	NA	NA		NA	NA	14	20	
Cadmium	**2.16**	**2.04**	NA	NA		NA	NA	5	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	10-279-02									
Mercury	**0.0769**	**0.127**	NA	NA		NA	NA	49	20	
Laboratory ID:	10-279-02									
	ORIG	DUP								
Lead	**14.3**	**13.3**	NA	NA		NA	NA	7	20	

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TOTAL METALS
EPA 6010D/6020B/7471B
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-279-02										
	MS	MSD	MS	MSD		MS	MSD				
Antimony	**88.0**	**83.5**	100	100	6.30	**82**	**77**	75-125	5	20	
Arsenic	**114**	**111**	100	100	18.0	**96**	**93**	75-125	3	20	
Chromium	**104**	**105**	100	100	18.2	**86**	**86**	75-125	0	20	
Copper	**80.5**	**76.0**	50.0	50.0	28.9	**103**	**94**	75-125	6	20	
Lead	**241**	**233**	250	250	28.2	**85**	**82**	75-125	3	20	
Nickel	**98.5**	**98.0**	100	100	16.2	**82**	**82**	75-125	1	20	
Selenium	**97.5**	**94.5**	100	100	ND	**98**	**95**	75-125	3	20	
Thallium	**44.4**	**43.9**	50.0	50.0	ND	**89**	**88**	75-125	1	20	
Zinc	**190**	**183**	100	100	104	**87**	**79**	75-125	4	20	
Laboratory ID:	10-279-02										
Beryllium	**49.8**	**51.3**	50.0	50.0	0.135	**99**	**102**	75-125	3	20	
Cadmium	**46.8**	**47.3**	50.0	50.0	2.16	**89**	**90**	75-125	1	20	
Silver	**22.5**	**22.3**	25.0	25.0	ND	**90**	**89**	75-125	1	20	
Laboratory ID:	10-279-02										
Mercury	**0.559**	**0.515**	0.500	0.500	0.0769	**96**	**88**	80-120	8	20	
Laboratory ID:	10-279-02										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**251**	**252**	250	250	14.3	**95**	**95**	75-125	0	20	

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PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-9-0-0.5**					
Laboratory ID:	10-279-01					
Naphthalene	**ND**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
2-Methylnaphthalene	**0.087**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
1-Methylnaphthalene	**ND**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthylene	**ND**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthene	**ND**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Fluorene	**ND**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Phenanthrene	**0.38**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Anthracene	**ND**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Fluoranthene	**0.79**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Pyrene	**0.79**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]anthracene	**0.84**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Chrysene	**0.77**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[b]fluoranthene	**1.3**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo(j,k)fluoranthene	**0.41**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]pyrene	**0.96**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Indeno(1,2,3-c,d)pyrene	**0.74**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Dibenz[a,h]anthracene	**0.18**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[g,h,i]perylene	**0.76**	0.070	EPA 8270E/SIM	10-29-20	10-31-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*85*	*46 - 113*				
Pyrene-d10	*95*	*45 - 114*				
Terphenyl-d14	*100*	*49 - 121*				

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PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-7-4.5-5**					
Laboratory ID:	10-279-02					
Naphthalene	**0.077**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
2-Methylnaphthalene	**0.088**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
1-Methylnaphthalene	**0.078**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthylene	**0.0070**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthene	**0.0047**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Fluorene	**0.0093**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Phenanthrene	**0.089**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Anthracene	**0.014**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Fluoranthene	**0.040**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Pyrene	**0.037**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]anthracene	**0.027**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Chrysene	**0.040**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[b]fluoranthene	**0.037**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo(j,k)fluoranthene	**0.0073**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]pyrene	**0.023**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Indeno(1,2,3-c,d)pyrene	**0.022**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Dibenz[a,h]anthracene	**0.0083**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[g,h,i]perylene	**0.030**	0.0046	EPA 8270E/SIM	10-29-20	10-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*67*	*46 - 113*				
Pyrene-d10	*76*	*45 - 114*				
Terphenyl-d14	*77*	*49 - 121*				

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PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-4-0-0.5**					
Laboratory ID:	10-279-03					
Naphthalene	**0.28**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
2-Methylnaphthalene	**0.80**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
1-Methylnaphthalene	**0.54**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthylene	**ND**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthene	**ND**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Fluorene	**ND**	0.084	EPA 8270E/SIM	10-29-20	10-31-20	U1
Phenanthrene	**0.62**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Anthracene	**0.082**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Fluoranthene	**0.17**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Pyrene	**0.18**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]anthracene	**0.13**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Chrysene	**0.22**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[b]fluoranthene	**0.13**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo(j,k)fluoranthene	**ND**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]pyrene	**ND**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Dibenz[a,h]anthracene	**ND**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[g,h,i]perylene	**ND**	0.082	EPA 8270E/SIM	10-29-20	10-31-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*80*	*46 - 113*				
Pyrene-d10	*84*	*45 - 114*				
Terphenyl-d14	*86*	*49 - 121*				

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PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-6-0-0.5**					
Laboratory ID:	10-279-05					
Naphthalene	**1.2**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
2-Methylnaphthalene	**4.4**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
1-Methylnaphthalene	**2.5**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthylene	**ND**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthene	**ND**	0.36	EPA 8270E/SIM	10-29-20	10-31-20	U1
Fluorene	**0.41**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Phenanthrene	**3.6**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Anthracene	**0.13**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Fluoranthene	**0.35**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Pyrene	**0.49**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]anthracene	**0.41**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Chrysene	**0.94**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[b]fluoranthene	**0.33**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo(j,k)fluoranthene	**ND**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]pyrene	**0.17**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Dibenz[a,h]anthracene	**0.087**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[g,h,i]perylene	**0.17**	0.076	EPA 8270E/SIM	10-29-20	10-31-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*105*	*46 - 113*				
Pyrene-d10	*113*	*45 - 114*				
Terphenyl-d14	*121*	*49 - 121*				

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PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-16-5-5.5**					
Laboratory ID:	10-279-07					
Naphthalene	**0.086**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
2-Methylnaphthalene	**0.048**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
1-Methylnaphthalene	**0.039**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthylene	**0.0055**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthene	**ND**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Fluorene	**ND**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Phenanthrene	**0.066**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Anthracene	**0.0071**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Fluoranthene	**0.049**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Pyrene	**0.032**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]anthracene	**0.011**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Chrysene	**0.025**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[b]fluoranthene	**0.030**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo(j,k)fluoranthene	**0.0060**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]pyrene	**0.011**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Indeno(1,2,3-c,d)pyrene	**0.017**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Dibenz[a,h]anthracene	**ND**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[g,h,i]perylene	**0.023**	0.0049	EPA 8270E/SIM	10-29-20	10-31-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*66*	*46 - 113*				
Pyrene-d10	*69*	*45 - 114*				
Terphenyl-d14	*69*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-13-1.5-2**					
Laboratory ID:	10-279-08					
Naphthalene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
2-Methylnaphthalene	**0.0044**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
1-Methylnaphthalene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthylene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Fluorene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Phenanthrene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Anthracene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Fluoranthene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Pyrene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]anthracene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Chrysene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[b]fluoranthene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo(j,k)fluoranthene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]pyrene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Dibenz[a,h]anthracene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[g,h,i]perylene	**ND**	0.0042	EPA 8270E/SIM	10-29-20	10-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*65*	*46 - 113*				
Pyrene-d10	*78*	*45 - 114*				
Terphenyl-d14	*76*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-17-1.5-2**					
Laboratory ID:	10-279-09					
Naphthalene	**0.098**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
2-Methylnaphthalene	**0.25**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
1-Methylnaphthalene	**0.25**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthylene	**ND**	0.014	EPA 8270E/SIM	10-29-20	10-31-20	U1
Acenaphthene	**ND**	0.012	EPA 8270E/SIM	10-29-20	10-31-20	U1
Fluorene	**ND**	0.016	EPA 8270E/SIM	10-29-20	10-31-20	U1
Phenanthrene	**0.16**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Anthracene	**0.029**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Fluoranthene	**0.036**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Pyrene	**0.039**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]anthracene	**0.043**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Chrysene	**0.037**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[b]fluoranthene	**0.025**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo(j,k)fluoranthene	**ND**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]pyrene	**0.020**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Indeno(1,2,3-c,d)pyrene	**0.0091**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Dibenz[a,h]anthracene	**0.0053**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[g,h,i]perylene	**0.018**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*51*	*46 - 113*				
Pyrene-d10	*57*	*45 - 114*				
Terphenyl-d14	*65*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-15-1-1.5**					
Laboratory ID:	10-279-10					
Naphthalene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
2-Methylnaphthalene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
1-Methylnaphthalene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthylene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Fluorene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Phenanthrene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Anthracene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Fluoranthene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Pyrene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]anthracene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Chrysene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[b]fluoranthene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo(j,k)fluoranthene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]pyrene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Dibenz[a,h]anthracene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[g,h,i]perylene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*72*	*46 - 113*				
Pyrene-d10	*84*	*45 - 114*				
Terphenyl-d14	*83*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-14-1.5-2**					
Laboratory ID:	10-279-11					
Naphthalene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
2-Methylnaphthalene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
1-Methylnaphthalene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthylene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Fluorene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Phenanthrene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Anthracene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Fluoranthene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Pyrene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]anthracene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Chrysene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[b]fluoranthene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo(j,k)fluoranthene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]pyrene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Dibenz[a,h]anthracene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[g,h,i]perylene	**ND**	0.0040	EPA 8270E/SIM	10-29-20	10-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*74*	*46 - 113*				
Pyrene-d10	*85*	*45 - 114*				
Terphenyl-d14	*81*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-1-0.5-1.5**					
Laboratory ID:	10-279-12					
Naphthalene	**0.015**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
2-Methylnaphthalene	**0.019**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
1-Methylnaphthalene	**0.016**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthylene	**ND**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthene	**ND**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Fluorene	**ND**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Phenanthrene	**0.015**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Anthracene	**ND**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Fluoranthene	**0.0073**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Pyrene	**0.0062**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]anthracene	**ND**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Chrysene	**0.0079**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[b]fluoranthene	**0.0077**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo(j,k)fluoranthene	**ND**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]pyrene	**ND**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Dibenz[a,h]anthracene	**ND**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[g,h,i]perylene	**0.0064**	0.0044	EPA 8270E/SIM	10-29-20	10-31-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*66*	*46 - 113*				
Pyrene-d10	*70*	*45 - 114*				
Terphenyl-d14	*71*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-2-1.5-2**					
Laboratory ID:	10-279-13					
Naphthalene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
2-Methylnaphthalene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
1-Methylnaphthalene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthylene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Fluorene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Phenanthrene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Anthracene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Fluoranthene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Pyrene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]anthracene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Chrysene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[b]fluoranthene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo(j,k)fluoranthene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]pyrene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Dibenz[a,h]anthracene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[g,h,i]perylene	**ND**	0.0043	EPA 8270E/SIM	10-29-20	10-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*73*	*46 - 113*				
Pyrene-d10	*81*	*45 - 114*				
Terphenyl-d14	*78*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-3-1.5-2**					
Laboratory ID:	10-279-14					
Naphthalene	**0.022**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
2-Methylnaphthalene	**0.050**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
1-Methylnaphthalene	**0.035**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthylene	**ND**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Acenaphthene	**ND**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Fluorene	**ND**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Phenanthrene	**0.040**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Anthracene	**ND**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Fluoranthene	**0.0075**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Pyrene	**0.0066**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]anthracene	**0.0064**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Chrysene	**0.014**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[b]fluoranthene	**0.0082**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo(j,k)fluoranthene	**ND**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[a]pyrene	**0.0044**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Dibenz[a,h]anthracene	**ND**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Benzo[g,h,i]perylene	**0.0047**	0.0041	EPA 8270E/SIM	10-29-20	10-31-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*60*	*46 - 113*				
Pyrene-d10	*68*	*45 - 114*				
Terphenyl-d14	*66*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1029S2					
Naphthalene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
2-Methylnaphthalene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
1-Methylnaphthalene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthylene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Acenaphthene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Fluorene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Phenanthrene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Anthracene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Fluoranthene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Pyrene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]anthracene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Chrysene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[b]fluoranthene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo(j,k)fluoranthene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[a]pyrene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Dibenz[a,h]anthracene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Benzo[g,h,i]perylene	**ND**	0.0020	EPA 8270E/SIM	10-29-20	10-30-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*75*	*46 - 113*				
Pyrene-d10	*83*	*45 - 114*				
Terphenyl-d14	*82*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
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Project: 202005-01.01

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-279-02										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	**0.120**	**0.121**	0.0833	0.0833	0.0558	77	78	51 - 115	1	26	
Acenaphthylene	**0.0623**	**0.0653**	0.0833	0.0833	0.00504	69	72	53 - 121	5	24	
Acenaphthene	**0.0677**	**0.0754**	0.0833	0.0833	0.00339	77	86	52 - 121	11	25	
Fluorene	**0.0644**	**0.0705**	0.0833	0.0833	0.00667	69	77	58 - 127	9	23	
Phenanthrene	**0.126**	**0.136**	0.0833	0.0833	0.0641	74	86	46 - 129	8	28	
Anthracene	**0.0732**	**0.0793**	0.0833	0.0833	0.0100	76	83	57 - 124	8	21	
Fluoranthene	**0.0877**	**0.0932**	0.0833	0.0833	0.0287	71	77	46 - 136	6	29	
Pyrene	**0.0859**	**0.0921**	0.0833	0.0833	0.0266	71	79	41 - 136	7	32	
Benzo[a]anthracene	**0.0983**	**0.114**	0.0833	0.0833	0.0191	95	114	56 - 136	15	25	
Chrysene	**0.0890**	**0.102**	0.0833	0.0833	0.0288	72	88	49 - 130	14	22	
Benzo[b]fluoranthene	**0.0813**	**0.0937**	0.0833	0.0833	0.0267	66	80	51 - 135	14	26	
Benzo(j,k)fluoranthene	**0.0686**	**0.0758**	0.0833	0.0833	0.00528	76	85	56 - 124	10	23	
Benzo[a]pyrene	**0.0728**	**0.0833**	0.0833	0.0833	0.0163	68	80	54 - 133	13	26	
Indeno(1,2,3-c,d)pyrene	**0.0727**	**0.0819**	0.0833	0.0833	0.0159	68	79	52 - 134	12	20	
Dibenz[a,h]anthracene	**0.0685**	**0.0791**	0.0833	0.0833	0.00596	75	88	58 - 127	14	17	
Benzo[g,h,i]perylene	**0.0763**	**0.0861**	0.0833	0.0833	0.0215	66	78	54 - 129	12	21	
Surrogate:											
2-Fluorobiphenyl						*62*	*67*	*46 - 113*			
Pyrene-d10						*70*	*77*	*45 - 114*			
Terphenyl-d14						*71*	*80*	*49 - 121*			

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-9-0-0.5**					
Laboratory ID:	10-279-01					
Diesel Range Organics	**ND**	26	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil	**190**	53	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**TP-7-4.5-5**					
Laboratory ID:	10-279-02					
Diesel Range Organics	**ND**	35	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	69	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*91*	*50-150*				
Client ID:	**TP-4-0-0.5**					
Laboratory ID:	10-279-03					
Diesel Range Organics	**34**	31	NWTPH-Dx	10-29-20	10-29-20	N
Lube Oil	**410**	62	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*91*	*50-150*				
Client ID:	**TP-6-0-0.5**					
Laboratory ID:	10-279-05					
Diesel Range Organics	**71**	29	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**160**	57	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**TP-16-5-5.5**					
Laboratory ID:	10-279-07					
Diesel Range Organics	**ND**	37	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	73	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**TP-13-1.5-2**					
Laboratory ID:	10-279-08					
Diesel Range Organics	**ND**	32	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	63	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*81*	*50-150*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-17-1.5-2**					
Laboratory ID:	10-279-09					
Diesel Range Organics	**ND**	41	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	82	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*83*	*50-150*				
Client ID:	**TP-15-1-1.5**					
Laboratory ID:	10-279-10					
Diesel Range Organics	**ND**	30	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	61	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*94*	*50-150*				
Client ID:	**TP-14-1.5-2**					
Laboratory ID:	10-279-11					
Diesel Range Organics	**ND**	30	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	60	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*91*	*50-150*				
Client ID:	**TP-1-0.5-1.5**					
Laboratory ID:	10-279-12					
Diesel Range Organics	**ND**	33	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**95**	65	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*95*	*50-150*				
Client ID:	**TP-2-1.5-2**					
Laboratory ID:	10-279-13					
Diesel Range Organics	**ND**	33	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	65	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*87*	*50-150*				
Client ID:	**TP-3-1.5-2**					
Laboratory ID:	10-279-14					
Diesel Range Organics	**ND**	51	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	100	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*87*	*50-150*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1029S2					
Diesel Range Organics	**ND**	25	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*96*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-279-02										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*91*	*100*	*50-150*			
Laboratory ID:	10-264-01										
	ORIG	DUP									
Diesel Range Organics	**50.4**	**50.5**	NA	NA		NA		NA	0	NA	N
Lube Oil	**308**	**289**	NA	NA		NA		NA	6	NA	
Surrogate:											
o-Terphenyl						*97*	*91*	*50-150*			

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
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Project: 202005-01.01

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-9-0-0.5**					
Laboratory ID:	10-279-01					
Gasoline	**ND**	6.0	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*110*	*58-129*				
Client ID:	**TP-7-4.5-5**					
Laboratory ID:	10-279-02					
Gasoline	**ND**	21	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*120*	*58-129*				
Client ID:	**TP-4-0-0.5**					
Laboratory ID:	10-279-03					
Gasoline	**ND**	7.9	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*109*	*58-129*				
Client ID:	**TP-6-0-0.5**					
Laboratory ID:	10-279-05					
Gasoline	**19**	9.2	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*105*	*58-129*				
Client ID:	**TP-16-5-5.5**					
Laboratory ID:	10-279-07					
Gasoline	**ND**	11	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*112*	*58-129*				
Client ID:	**TP-13-1.5-2**					
Laboratory ID:	10-279-08					
Gasoline	**ND**	7.8	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*111*	*58-129*				
Client ID:	**TP-17-1.5-2**					
Laboratory ID:	10-279-09					
Gasoline	**ND**	17	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*90*	*58-129*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-15-1-1.5**					
Laboratory ID:	10-279-10					
Gasoline	**ND**	7.3	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*102*	*58-129*				
Client ID:	**TP-14-1.5-2**					
Laboratory ID:	10-279-11					
Gasoline	**ND**	7.3	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*113*	*58-129*				
Client ID:	**TP-1-0.5-1.5**					
Laboratory ID:	10-279-12					
Gasoline	**ND**	10	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*111*	*58-129*				
Client ID:	**TP-2-1.5-2**					
Laboratory ID:	10-279-13					
Gasoline	**ND**	9.6	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*113*	*58-129*				
Client ID:	**TP-3-1.5-2**					
Laboratory ID:	10-279-14					
Gasoline	**ND**	22	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*108*	*58-129*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

GASOLINE RANGE ORGANICS
NWTPH-Gx
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1028S2					
Gasoline	**ND**	5.0	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*95*	*58-129*				
Laboratory ID:	MB1028S3					
Gasoline	**ND**	5.0	NWTPH-Gx	10-28-20	10-28-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*58-129*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-279-02										
	ORIG	DUP									
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*120*	*121*	*58-129*			
Laboratory ID:	10-264-01										
	ORIG	DUP									
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*107*	*108*	*58-129*			

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

PCBs EPA 8082A

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-7-4.5-5**					
Laboratory ID:	10-279-02					
Aroclor 1016	**ND**	0.035	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1221	**ND**	0.035	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1232	**ND**	0.035	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1242	**ND**	0.035	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1248	**ND**	0.035	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1254	**ND**	0.035	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1260	**ND**	0.035	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1262	**ND**	0.035	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1268	**ND**	0.035	EPA 8082A	11-4-20	11-4-20	X
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*98*	*46-125*				
Client ID:	**TP-6-0-0.5**					
Laboratory ID:	10-279-05					
Aroclor 1016	**ND**	0.029	EPA 8082A	11-4-20	11-4-20	
Aroclor 1221	**ND**	0.029	EPA 8082A	11-4-20	11-4-20	
Aroclor 1232	**ND**	0.029	EPA 8082A	11-4-20	11-4-20	
Aroclor 1242	**ND**	0.029	EPA 8082A	11-4-20	11-4-20	
Aroclor 1248	**ND**	0.029	EPA 8082A	11-4-20	11-4-20	
Aroclor 1254	**ND**	0.029	EPA 8082A	11-4-20	11-4-20	
Aroclor 1260	**ND**	0.029	EPA 8082A	11-4-20	11-4-20	
Aroclor 1262	**ND**	0.029	EPA 8082A	11-4-20	11-4-20	
Aroclor 1268	**ND**	0.029	EPA 8082A	11-4-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*90*	*46-125*				

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

PCBs EPA 8082A
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1104S1					
Aroclor 1016	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1221	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1232	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1242	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1248	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1254	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1260	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1262	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1268	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*98*	*46-125*				
Laboratory ID:	MB1104S1					
Aroclor 1016	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1221	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1232	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1242	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1248	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1254	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1260	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1262	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Aroclor 1268	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	X
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*97*	*46-125*				

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PCBs EPA 8082A
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-279-02										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	**0.224**	**0.292**	0.250	0.250	ND	**89**	**117**	43-125	26	15	L, X
Surrogate:											
DCB						*102*	*102*	*46-125*			
SPIKE BLANKS											
Laboratory ID:	SB1104S1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	**0.280**	**0.260**	0.250	0.250	N/A	**112**	**104**	50-134	7	18	
Surrogate:											
DCB						*96*	*96*	*46-125*			
Laboratory ID:	SB1104S1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	**0.301**	**0.272**	0.250	0.250	N/A	**120**	**109**	50-134	10	18	X
Surrogate:											
DCB						*102*	*101*	*46-125*			

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

TCLP METALS
EPA 1311/6010D/7470A

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-7-4.5-5**					
Laboratory ID:	10-279-02					
Arsenic	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Barium	**0.46**	0.20	EPA 6010D	11-2-20	11-2-20	
Cadmium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Chromium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Lead	**ND**	0.20	EPA 6010D	11-2-20	11-2-20	
Mercury	**ND**	0.0050	EPA 7470A	10-30-20	10-30-20	
Selenium	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.040	EPA 6010D	11-2-20	11-2-20	
Client ID:	**TP-17-1.5-2**					
Laboratory ID:	10-279-09					
Arsenic	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Barium	**1.5**	0.20	EPA 6010D	11-2-20	11-2-20	
Cadmium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Chromium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Lead	**ND**	0.20	EPA 6010D	11-2-20	11-2-20	
Mercury	**ND**	0.0050	EPA 7470A	10-30-20	10-30-20	
Selenium	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.040	EPA 6010D	11-2-20	11-2-20	

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TCLP METALS
EPA 1311/6010D/7470A
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1030TM1					
Arsenic	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Barium	**ND**	0.20	EPA 6010D	11-2-20	11-2-20	
Cadmium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Chromium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Lead	**ND**	0.20	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.040	EPA 6010D	11-2-20	11-2-20	
Laboratory ID:	MB1030T1					
Mercury	**ND**	0.0050	EPA 7470A	10-30-20	10-30-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-279-02										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Barium	**0.462**	**0.462**	NA	NA		NA		NA	0	20	
Cadmium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Selenium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Laboratory ID:	10-279-02										
Mercury	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-279-02										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**3.92**	**3.90**	4.00	4.00	ND	**98**	**98**	75-125	1	20	
Barium	**4.29**	**4.30**	4.00	4.00	0.462	**96**	**96**	75-125	0	20	
Cadmium	**1.82**	**1.81**	2.00	2.00	ND	**91**	**90**	75-125	1	20	
Chromium	**3.80**	**3.78**	4.00	4.00	ND	**95**	**95**	75-125	1	20	
Lead	**9.55**	**9.51**	10.0	10.0	ND	**96**	**95**	75-125	0	20	
Selenium	**4.05**	**4.01**	4.00	4.00	ND	**101**	**100**	75-125	1	20	
Silver	**0.960**	**0.968**	1.00	1.00	ND	**96**	**97**	75-125	1	20	
Laboratory ID:	10-279-02										
Mercury	**0.0488**	**0.0486**	0.0500	0.0500	ND	**98**	**97**	75-125	0	20	

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

TOTAL SOLIDS
SM 2540G

Matrix: Soil
Units: % Solids

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-9-0-0.5**					
Laboratory ID:	10-279-01					
Total Solids	**95**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-7-4.5-5**					
Laboratory ID:	10-279-02					
Total Solids	**72**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-4-0-0.5**					
Laboratory ID:	10-279-03					
Total Solids	**81**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-6-0-0.5**					
Laboratory ID:	10-279-05					
Total Solids	**88**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-16-5-5.5**					
Laboratory ID:	10-279-07					
Total Solids	**68**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-13-1.5-2**					
Laboratory ID:	10-279-08					
Total Solids	**79**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-17-1.5-2**					
Laboratory ID:	10-279-09					
Total Solids	**61**	0.50	SM 2540G	10-29-20	10-30-20	

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

TOTAL SOLIDS
SM 2540G

Matrix: Soil
Units: % Solids

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TP-15-1-1.5**					
Laboratory ID:	10-279-10					
Total Solids	**83**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-14-1.5-2**					
Laboratory ID:	10-279-11					
Total Solids	**83**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-1-0.5-1.5**					
Laboratory ID:	10-279-12					
Total Solids	**77**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-2-1.5-2**					
Laboratory ID:	10-279-13					
Total Solids	**77**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**TP-3-1.5-2**					
Laboratory ID:	10-279-14					
Total Solids	**49**	0.50	SM 2540G	10-29-20	10-30-20	

Date of Report: November 17, 2020
Samples Submitted: October 23, 2020
Laboratory Reference: 2010-279
Project: 202005-01.01

TOTAL SOLIDS
SM 2540G
QUALITY CONTROL

Matrix: Soil
Units: % Solids

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	10-279-02								
	ORIG	DUP							
Total Solids	**72.1**	**70.8**	NA	NA	NA	NA	2	20	
Laboratory ID:	10-264-01								
	ORIG	DUP							
Total Solids	**89.3**	**91.7**	NA	NA	NA	NA	3	20	

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

November 17, 2020

Vista Work Order No. 2002337

Mr. David Baumeister
OnSite Environmental Inc.
14648 NE 95th Street
Redmond, WA 98052

Dear Mr. Baumeister,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on October 28, 2020 under your Project Name '202005-0101'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier
Laboratory Director

Vista Work Order No. 2002337
Case Narrative

Sample Condition on Receipt:

One solid sample was received and stored securely in accordance with Vista standard operating procedures and EPA methodology. The sample was received in good condition and within the method temperature requirements. The sample was received in a clear glass jar.

Analytical Notes:

EPA Method 1613B

This sample was extracted and analyzed for tetra-through-octa chlorinated dioxins and furans by EPA Method 1613B using a ZB-DIOXIN GC column.

Holding Times

The sample was extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank. The OPR recoveries were within the method acceptance criteria.

Labeled standard recoveries for all QC and field samples were within method acceptance criteria.

TABLE OF CONTENTS

Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2002337-01	TP-6-0-0.5	21-Oct-20 12:13	28-Oct-20 09:49	Clear Glass Jar, 250mL

ANALYTICAL RESULTS

Sample ID: Method Blank — EPA Method 1613B

Client Data

Name: OnSite Environmental Inc.
Project: 202005-0101
Matrix: Solid

Laboratory Data

Lab Sample: B0K0041-BLK1
QC Batch: B0K0041 Date Extracted: 05-Nov-20
Sample Size: 10.0 g Column: ZB-DIOXIN

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.0263			13-Nov-20 10:55	1
1,2,3,7,8-PeCDD	ND	0.0497			13-Nov-20 10:55	1
1,2,3,4,7,8-HxCDD	ND	0.0568			13-Nov-20 10:55	1
1,2,3,6,7,8-HxCDD	ND	0.0574			13-Nov-20 10:55	1
1,2,3,7,8,9-HxCDD	ND	0.0721			13-Nov-20 10:55	1
1,2,3,4,6,7,8-HpCDD	ND	0.0573			13-Nov-20 10:55	1
OCDD	ND	0.116			13-Nov-20 10:55	1
2,3,7,8-TCDF	ND	0.0198			13-Nov-20 10:55	1
1,2,3,7,8-PeCDF	ND	0.0288			13-Nov-20 10:55	1
2,3,4,7,8-PeCDF	ND	0.0235			13-Nov-20 10:55	1
1,2,3,4,7,8-HxCDF	ND	0.0329			13-Nov-20 10:55	1
1,2,3,6,7,8-HxCDF	ND	0.0337			13-Nov-20 10:55	1
2,3,4,6,7,8-HxCDF	ND	0.0389			13-Nov-20 10:55	1
1,2,3,7,8,9-HxCDF	ND	0.0698			13-Nov-20 10:55	1
1,2,3,4,6,7,8-HpCDF	ND	0.0487			13-Nov-20 10:55	1
1,2,3,4,7,8,9-HpCDF	ND	0.0568			13-Nov-20 10:55	1
OCDF	ND	0.0915			13-Nov-20 10:55	1
Toxic Equivalent						
TEQMinWHO2005Dioxin	0.00					
Totals						
Total TCDD	ND	0.0263				
Total PeCDD	ND	0.0497				
Total HxCDD	ND	0.0721				
Total HpCDD	ND	0.0573				
Total TCDF	ND	0.0198				
Total PeCDF	ND	0.0288				
Total HxCDF	ND	0.0698				
Total HpCDF	ND	0.0568				

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	80.4	25 - 164		13-Nov-20 10:55	1
13C-1,2,3,7,8-PeCDD	IS	81.8	25 - 181		13-Nov-20 10:55	1
13C-1,2,3,4,7,8-HxCDD	IS	88.4	32 - 141		13-Nov-20 10:55	1
13C-1,2,3,6,7,8-HxCDD	IS	89.3	28 - 130		13-Nov-20 10:55	1
13C-1,2,3,7,8,9-HxCDD	IS	80.0	32 - 141		13-Nov-20 10:55	1
13C-1,2,3,4,6,7,8-HpCDD	IS	80.0	23 - 140		13-Nov-20 10:55	1
13C-OCDD	IS	74.4	17 - 157		13-Nov-20 10:55	1
13C-2,3,7,8-TCDF	IS	83.2	24 - 169		13-Nov-20 10:55	1
13C-1,2,3,7,8-PeCDF	IS	84.6	24 - 185		13-Nov-20 10:55	1
13C-2,3,4,7,8-PeCDF	IS	90.3	21 - 178		13-Nov-20 10:55	1
13C-1,2,3,4,7,8-HxCDF	IS	82.0	26 - 152		13-Nov-20 10:55	1
13C-1,2,3,6,7,8-HxCDF	IS	82.7	26 - 123		13-Nov-20 10:55	1
13C-2,3,4,6,7,8-HxCDF	IS	83.8	28 - 136		13-Nov-20 10:55	1
13C-1,2,3,7,8,9-HxCDF	IS	71.1	29 - 147		13-Nov-20 10:55	1
13C-1,2,3,4,6,7,8-HpCDF	IS	75.5	28 - 143		13-Nov-20 10:55	1
13C-1,2,3,4,7,8,9-HpCDF	IS	71.1	26 - 138		13-Nov-20 10:55	1
13C-OCDF	IS	71.5	17 - 157		13-Nov-20 10:55	1
37Cl-2,3,7,8-TCDD	CRS	95.5	35 - 197		13-Nov-20 10:55	1

EDL - Sample specifc estimated detection limit
EMPC - Estimated maximum possible concentration

The results are reported in dry weight.
The sample size is reported in wet weight.

Sample ID: OPR **EPA Method 1613B**

Client Data
Name: OnSite Environmental Inc.
Project: 202005-0101
Matrix: Solid

Laboratory Data
Lab Sample: B0K0041-BS1
QC Batch: B0K0041 Date Extracted: 05-Nov-20 06:05
Sample Size: 10.0 g Column: ZB-DIOXIN

Analyte	Amt Found (pg/g)	Spike Amt	% Recovery	Limits	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	21.0	20.0	105	67-158		13-Nov-20 09:25	1
1,2,3,7,8-PeCDD	106	100	106	70-142		13-Nov-20 09:25	1
1,2,3,4,7,8-HxCDD	101	100	101	70-164		13-Nov-20 09:25	1
1,2,3,6,7,8-HxCDD	104	100	104	76-134		13-Nov-20 09:25	1
1,2,3,7,8,9-HxCDD	103	100	103	64-162		13-Nov-20 09:25	1
1,2,3,4,6,7,8-HpCDD	102	100	102	70-140		13-Nov-20 09:25	1
OCDD	204	200	102	78-144		13-Nov-20 09:25	1
2,3,7,8-TCDF	19.4	20.0	96.8	75-158		13-Nov-20 09:25	1
1,2,3,7,8-PeCDF	102	100	102	80-134		13-Nov-20 09:25	1
2,3,4,7,8-PeCDF	102	100	102	68-160		13-Nov-20 09:25	1
1,2,3,4,7,8-HxCDF	103	100	103	72-134		13-Nov-20 09:25	1
1,2,3,6,7,8-HxCDF	101	100	101	84-130		13-Nov-20 09:25	1
2,3,4,6,7,8-HxCDF	100	100	100	70-156		13-Nov-20 09:25	1
1,2,3,7,8,9-HxCDF	98.9	100	98.9	78-130		13-Nov-20 09:25	1
1,2,3,4,6,7,8-HpCDF	103	100	103	82-122		13-Nov-20 09:25	1
1,2,3,4,7,8,9-HpCDF	100	100	100	78-138		13-Nov-20 09:25	1
OCDF	200	200	100	63-170		13-Nov-20 09:25	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	88.5	20-175		13-Nov-20 09:25	1
13C-1,2,3,7,8-PeCDD	IS	89.5	21-227		13-Nov-20 09:25	1
13C-1,2,3,4,7,8-HxCDD	IS	91.6	21-193		13-Nov-20 09:25	1
13C-1,2,3,6,7,8-HxCDD	IS	91.8	25-163		13-Nov-20 09:25	1
13C-1,2,3,7,8,9-HxCDD	IS	90.8	21-193		13-Nov-20 09:25	1
13C-1,2,3,4,6,7,8-HpCDD	IS	87.0	26-166		13-Nov-20 09:25	1
13C-OCDD	IS	79.6	13-199		13-Nov-20 09:25	1
13C-2,3,7,8-TCDF	IS	88.7	22-152		13-Nov-20 09:25	1
13C-1,2,3,7,8-PeCDF	IS	93.6	21-192		13-Nov-20 09:25	1
13C-2,3,4,7,8-PeCDF	IS	95.6	13-328		13-Nov-20 09:25	1
13C-1,2,3,4,7,8-HxCDF	IS	84.0	19-202		13-Nov-20 09:25	1
13C-1,2,3,6,7,8-HxCDF	IS	85.3	21-159		13-Nov-20 09:25	1
13C-2,3,4,6,7,8-HxCDF	IS	85.0	22-176		13-Nov-20 09:25	1
13C-1,2,3,7,8,9-HxCDF	IS	87.1	17-205		13-Nov-20 09:25	1
13C-1,2,3,4,6,7,8-HpCDF	IS	78.0	21-158		13-Nov-20 09:25	1
13C-1,2,3,4,7,8,9-HpCDF	IS	75.8	20-186		13-Nov-20 09:25	1
13C-OCDF	IS	77.7	13-199		13-Nov-20 09:25	1
37Cl-2,3,7,8-TCDD	CRS	106	31-191		13-Nov-20 09:25	1

Sample ID: TP-6-0-0.5

EPA Method 1613B

Client Data

Name: OnSite Environmental Inc.
Project: 202005-0101
Matrix: Solid
Date Collected: 21-Oct-20 12:13

Laboratory Data

Lab Sample: 2002337-01
QC Batch: B0K0041
Sample Size: 12.2 g
% Solids: 82.4
Date Received: 28-Oct-20 09:49
Date Extracted: 05-Nov-20
Column: ZB-DIOXIN

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND		0.0977		14-Nov-20 05:46	1
1,2,3,7,8-PeCDD	0.665			J	14-Nov-20 05:46	1
1,2,3,4,7,8-HxCDD	ND		0.812		14-Nov-20 05:46	1
1,2,3,6,7,8-HxCDD	12.6				14-Nov-20 05:46	1
1,2,3,7,8,9-HxCDD	5.14				14-Nov-20 05:46	1
1,2,3,4,6,7,8-HpCDD	187				14-Nov-20 05:46	1
OCDD	1720				14-Nov-20 05:46	1
2,3,7,8-TCDF	0.170			J	14-Nov-20 05:46	1
1,2,3,7,8-PeCDF	0.189			J	14-Nov-20 05:46	1
2,3,4,7,8-PeCDF	0.361			J	14-Nov-20 05:46	1
1,2,3,4,7,8-HxCDF	0.504			J	14-Nov-20 05:46	1
1,2,3,6,7,8-HxCDF	0.332			J	14-Nov-20 05:46	1
2,3,4,6,7,8-HxCDF	0.225			J	14-Nov-20 05:46	1
1,2,3,7,8,9-HxCDF	0.0933			J	14-Nov-20 05:46	1
1,2,3,4,6,7,8-HpCDF	10.2				14-Nov-20 05:46	1
1,2,3,4,7,8,9-HpCDF	0.509			J	14-Nov-20 05:46	1
OCDF	43.1				14-Nov-20 05:46	1
Toxic Equivalent						
TEQMinWHO2005Dioxin	5.19					
Totals						
Total TCDD	1.82		1.96			
Total PeCDD	3.80		4.79			
Total HxCDD	89.3		90.1			
Total HpCDD	409					
Total TCDF	0.620		0.690			
Total PeCDF	3.74		4.32			
Total HxCDF	15.1					
Total HpCDF	41.1					

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	95.7	25 - 164		14-Nov-20 05:46	1
13C-1,2,3,7,8-PeCDD	IS	90.9	25 - 181		14-Nov-20 05:46	1
13C-1,2,3,4,7,8-HxCDD	IS	92.7	32 - 141		14-Nov-20 05:46	1
13C-1,2,3,6,7,8-HxCDD	IS	95.1	28 - 130		14-Nov-20 05:46	1
13C-1,2,3,7,8,9-HxCDD	IS	94.9	32 - 141		14-Nov-20 05:46	1
13C-1,2,3,4,6,7,8-HpCDD	IS	93.8	23 - 140		14-Nov-20 05:46	1
13C-OCDD	IS	89.4	17 - 157		14-Nov-20 05:46	1
13C-2,3,7,8-TCDF	IS	97.3	24 - 169		14-Nov-20 05:46	1
13C-1,2,3,7,8-PeCDF	IS	99.0	24 - 185		14-Nov-20 05:46	1
13C-2,3,4,7,8-PeCDF	IS	97.5	21 - 178		14-Nov-20 05:46	1
13C-1,2,3,4,7,8-HxCDF	IS	88.9	26 - 152		14-Nov-20 05:46	1
13C-1,2,3,6,7,8-HxCDF	IS	90.9	26 - 123		14-Nov-20 05:46	1
13C-2,3,4,6,7,8-HxCDF	IS	90.6	28 - 136		14-Nov-20 05:46	1
13C-1,2,3,7,8,9-HxCDF	IS	91.5	29 - 147		14-Nov-20 05:46	1
13C-1,2,3,4,6,7,8-HpCDF	IS	85.1	28 - 143		14-Nov-20 05:46	1
13C-1,2,3,4,7,8,9-HpCDF	IS	86.8	26 - 138		14-Nov-20 05:46	1
13C-OCDF	IS	83.4	17 - 157		14-Nov-20 05:46	1
37Cl-2,3,7,8-TCDD	CRS	106	35 - 197		14-Nov-20 05:46	1

EDL - Sample specifc estimated detection limit
EMPC - Estimated maximum possible concentration

The results are reported in dry weight.
The sample size is reported in wet weight.

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
CRS	Cleanup Recovery Standard
D	Dilution
DL	Detection Limit
E	The associated compound concentration exceeded the calibration range of the instrument
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
IS	Internal Standard
J	The amount detected is below the Reporting Limit/LOQ
K	EMPC (specific projects only)
LOD	Limit of Detection
LOQ	Limit of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
MDL	Method Detection Limit
NA	Not applicable
ND	Not Detected
OPR	Ongoing Precision and Recovery sample
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
RL	Reporting Limit
TEQ	Toxic Equivalency
U	Not Detected (specific projects only)

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

Vista Analytical Laboratory Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	19-013-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-23
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2018017
Massachusetts Department of Environmental Protection	N/A
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	1521520
New Hampshire Environmental Accreditation Program	207718-B
New Jersey Department of Environmental Protection	190001
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-010
Pennsylvania Department of Environmental Protection	016
Texas Commission on Environmental Quality	T104704189-19-10
Vermont Department of Health	VT-4042
Virginia Department of General Services	10272
Washington Department of Ecology	C584-19
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	**Method**
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA TO-9A

MATRIX: Biological Tissue	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	**Method**
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613/1613B
1,4-Dioxane (1,4-Diethyleneoxide) analysis by GC/HRMS	EPA 522
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	ISO 25101 2009

MATRIX: Non-Potable Water	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	**Method**
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

2002337 2.3

OnSite Environmental Inc.

14648 NE 95th Street, Redmond, WA 98052 · (425) 883-3881

Laboratory Reference #: 10-279

Laboratory: Vista Analytical Laboratory

Attention: Jennifer Miller

Address: 1104 Windfield Way, El Dorado Hills, CA 95762

Phone Number: (916) 673-1520

Turnaround Request

1 Day 2 Day 3 Day

Standard

Other:

Project Manager: David Baumeister

email: dbaumeister@onsite-env.com

Project Number: 202005-0101

Project Name:

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	Requested Analyses
	TP-6-0-0.5	10/21/20	12:13	S	1	Dioxin/Furans

Signature	Company	Date	Time	Comments/Special Instructions
Relinquished by:	OSE	10/27/20	1600	
Received by:	UPS			
Relinquished by:	UPS			
Received by:	VAL	1/28/20	09:49	
Relinquished by:				
Received by:				

Vista Analytical Laboratory

Sample Log-In Checklist

Page # 1 of 1

Vista Work Order #: 2002337 TAT Std

Samples Arrival:	Date/Time: 10/28/20 09:49	Initials:	Location: WR-2 Shelf/Rack: NA

Delivered By:	FedEx	UPS	On Trac	GLS	DHL	Hand Delivered	Other
Preservation:	Ice	Blue Ice	Techni Ice	Dry Ice	None		

Temp °C: 2.3 (uncorrected)	Probe used: Y / N	Thermometer ID: IR-4
Temp °C: 2.3 (corrected)		

	YES	NO	NA
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?			X
Airbill — Trk # 1Z684E1W0195332127	✓		
Shipping Documentation Present?	✓		
Shipping Container: Vista / Client / Retain / Return / Dispose	✓		
Chain of Custody / Sample Documentation Present?	✓		
Chain of Custody / Sample Documentation Complete?	✓		
Holding Time Acceptable?	✓		

Logged In:	Date/Time: 10/30/20 1107	Initials: VBB	Location: WR-2 Shelf/Rack: F2

COC Anomaly/Sample Acceptance Form completed?	✓		

Comments:

CoC/Label Reconciliation Report WO# 2002337

LabNumber	CoC Sample ID	SampleAlias	Sample Date/Time	Container	BaseMatrix	Sample Comments
2002337-01	A TP-6-0-0.5 ☑		21-Oct-20 12:13 ☑	Clear Glass Jar, 250mL (A)	Solid	

Checkmarks indicate that information on the COC reconciled with the sample label.
Any discrepancies are noted in the following columns.

	Yes	No	NA
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Adequate Sample Volume?	✓		
Container Type Appropriate for Analysis(es)		✓	
Preservation Documented: Na2S2O3 Trizma None Other			✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Comments:
(A) Sample rec'd in clear glass jar.

Verifed by/Date: BDB 10/30/20

Vista Analytical Laboratory

ANOMALY FORM

Vista Work Order 2002337

Initial/Date — The following checked issues were noted during sample receipt and login:

_____ ☐ **1. The samples were received out of temperature at (WI-PHT):** _____
Was Ice present: Yes No Melted Blue Ice

_____ ☐ 2. The Chain-of-Custody (CoC) was not relinquished properly.

_____ ☐ 3. The CoC did not include collection time(s). 00:00 will be used unless notified otherwise.

_____ ☐ 4. The sample(s) did not include a sample collection time. All or Sample Name: _____

_____ ☐ 5. A sample ID discrepancy was found. See the Reconciliation report.
The CoC Sample ID will be used unless notified otherwise.

_____ ☐ 6. A sample date and/or time discrepancy was found. See the Reconciliation report.
The CoC Sample date/time will be used unless notified otherwise.

_____ ☐ **7. The CoC did not include a sample matrix. The following sample matrix will be used:** _____

_____ ☐ **8. Insufficent volume received for analysis. All or Sample Name:** _____

_____ ☐ 9. The backup bottle was received broken. Sample Name: _____

_____ ☐ **10. CoC not received, illegible or destroyed.**

_____ ☐ **11. The sample(s) were received out of holding time. All or Sample Name:** _____

_____ ☐ **12. The CoC did not include an analysis. All or Sample Name:** _____

_____ ☐ **13. Sample(s) received without collection date. All or Sample Name:** _____

_____ ☐ **14. Sample(s) not received. All or Sample Name:** _____

_____ ☐ **15. Sample(s) received broken. All or Sample Name:** _____

JJB 10/30/20 ☑ **16. An incorrect container-type was used. All or Sample Name:** TP-6-0.0.5

_____ ☐ 17. Other:

Bolded items require sign-off

Client Contacted: Yes, via email

Date of Contact: 10/30/2020

Vista Client Manager: KJR

Resolution: Client informed of container type in acknowledgement letter email

10-279

Chain of Custody Record & Laboratory Analysis Request

Laboratory Name: OnSite
Date: 10/22/2020
Project Name: ABC Recycling Phase 2
Project Number: 202005-b1.01
Project Manager: Derek Ormerod / Matt Wolfmeyer
Phone Number: 206-331-1738
Shipment Method: FedEx

ANCHOR QEA

Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	Test Parameters: Mercury / Metals (PP Metals)	Total Solids / PAHs	Grain Size	Total Organic Carbon	Dioxin/Furans	Archive	TPH Dx / ETPHs	GRO	MS/MSD	PCBs	TCLP Metals	HOLD	TOTAL SOLIDS 2540G	Comments/Preservation
1	TP-9-0-0.5	10/21/2020 0837	S	4	⊗	⊗			X	X	⊗	⊗					⊗	~~HOLD~~
2	TP-7-4.5-5	10/21/2020 1016	S	4	⊗	⊗			X	X	⊗	⊗	⊗	⊗	⊗		⊗	MS/MSD SAMPLE
3	TP-4-0-0.5	10/21/2020 1111	S	4	⊗	⊗			X	X	⊗	⊗					⊗	
4	TP-4-3.5-4	10/21/2020 1133	S	4	X	X			X	X	X	X				X		
5	TP-6-0-0.5	10/21/2020 1213	S	4	⊗	⊗			⊗	X	⊗	⊗		⊗			⊗	
6	TP-16-0-0.5	10/21/2020 1410	S	4	X	X			X	X	X	X				X		
7	TP-16-5-5.5	10/21/2020 1527	S	3	⊗	⊗			X		⊗	⊗					⊗	
8	TP-13-1.5-2	10/22/2020 0837	S	4	⊗	⊗			X	X	⊗	⊗					⊗	
9	TP-17-1.5-2	10/22/2020 0926	S	4	⊗	⊗			X	X	⊗	⊗			⊗		⊗	
10	TP-15-1-1.5	10/22/2020 1010	S	4	⊗	⊗			X	X	⊗	⊗					⊗	
11	TP-14-1.5-2	10/22/2020 1034	S	4	⊗	⊗			X	X	⊗	⊗					⊗	
12	TP-1-0.5-1.5	10/22/2020 1145	S	4	⊗	⊗			X	X	⊗	⊗					⊗	
13	TP-2-1.5-2	10/22/2020 1214	S	4	⊗	⊗			X	X	⊗	⊗					⊗	
14	TP-3-1.5-2	10/22/2020 1256	S	4	⊗	⊗			X	X	⊗	⊗					⊗	
15																		
16																		
17																		
18																		

Notes: Hold until further instruction provided
(⊗ Added 10/26/2020. DB (STA)

Relinquished By:	Company: Anchor QEA, LLC
Tanner Kamila	10/22/2020 1402
Signature/Printed Name	Date/Time

Received By:	Company: O&E
M. Voun	10/23/20 1115
Signature/Printed Name	Date/Time

Relinquished By:	Company:
Signature/Printed Name	Date/Time

Received By:	Company:
Signature/Printed Name	Date/Time

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Sample/Cooler Receipt and Acceptance Checklist

Client: ANC

Client Project Name/Number: 202005-01.01

OnSite Project Number: 10-279

Initiated by: MW

Date Initiated: 10/23/20

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	(Yes)	No	N/A	1 2 3 4	
1.2 Were the custody seals intact?	(Yes)	No	N/A	1 2 3 4	
1.3 Were the custody seals signed and dated by last custodian?	(Yes)	No	N/A	1 2 3 4	
1.4 Were the samples delivered on ice or blue ice?	(Yes)	No	N/A	1 2 3 4	
1.5 Were samples received between 0-6 degrees Celsius?	(Yes)	No	N/A	Temperature: 5.5	
1.6 Have shipping bills (if any) been attached to the back of this form?	(Yes)	(N/A)			
1.7 How were the samples delivered?	Client	Courier	(UPS/FedEx)	OSE Pickup	Other

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	(Yes)	No		1 2 3 4
2.2 Was the COC legible and written in permanent ink?	(Yes)	No		1 2 3 4
2.3 Have samples been relinquished and accepted by each custodian?	(Yes)	No		1 2 3 4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	Yes	(No)		1 2 3 4
2.5 Were all of the samples listed on the COC submitted?	(Yes)	No		1 2 3 4
2.6 Were any of the samples submitted omitted from the COC?	Yes	(No)		1 2 3 4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	(Yes)	No		1 2 3 4
3.2 Were any sample labels missing or illegible?	Yes	(No)		1 2 3 4
3.3 Have the correct containers been used for each analysis requested?	(Yes)	No		1 2 3 4
3.4 Have the samples been correctly preserved?	(Yes)	No	N/A	1 2 3 4
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	(N/A)	1 2 3 4
3.6 Is there sufficient sample submitted to perform requested analyses?	(Yes)	No		1 2 3 4
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	(No)		1 2 3 4
3.8 Was method 5035A used?	(Yes)	No	N/A	1 2 3 4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#	2	N/A	1 2 3 4

Explain any discrepancies:

2.4) #7) -6- on 1 jar

3.2) #8-14) MeOH vials horizontal

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 17, 2020

Derek Ormerod
Anchor QEA
1201 3rd Ave, Suite 2600
Seattle, WA 98101

Re: Analytical Data for Project 202005-01.01
Laboratory Reference No. 2010-327

Dear Derek:

Enclosed are the analytical results and associated quality control data for samples submitted on October 28, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

Case Narrative

Samples were collected on October 26 and 27, 2020 and received by the laboratory on October 28, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH-Gx (soil) Analysis

The surrogate percent recovery is outside control limits on the high end for sample GP-2-25-27 due to reduced methanol volumes in the provided field-extracted Method 5035A VOA vial. Because the sample is non-detect, no further action was taken.

PCBs EPA 8082A (soil) Analysis

The Sample 10-279-02 was used as the MS/MSD pair. The RPD between the MS/MSD (26%) was above quality control limit of 15%. The sample was re-extracted and rerun with similar results and attributed to matrix effect. All other QC was within their corresponding quality control limits. No further action was performed.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Sediment
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-2-8-9**					
Laboratory ID:	10-327-01					
Gasoline	**ND**	8.1	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*107*	*58-129*				
Client ID:	**GP-2-25-27**					
Laboratory ID:	10-327-03					
Gasoline	**ND**	20	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*163*	*58-129*				Q
Client ID:	**GP-1-5.7-9.7**					
Laboratory ID:	10-327-04					
Gasoline	**ND**	7.0	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*102*	*58-129*				
Client ID:	**GP-1-20-22**					
Laboratory ID:	10-327-06					
Gasoline	**ND**	7.8	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*113*	*58-129*				
Client ID:	**GP-1-20-22-Dup**					
Laboratory ID:	10-327-07					
Gasoline	**ND**	7.6	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*111*	*58-129*				
Client ID:	**GP-5-6.9-7.5**					
Laboratory ID:	10-327-08					
Gasoline	**ND**	6.5	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*98*	*58-129*				
Client ID:	**GP-5-20-22**					
Laboratory ID:	10-327-10					
Gasoline	**ND**	6.4	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*106*	*58-129*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Sediment
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-6-10.8-15**					
Laboratory ID:	10-327-11					
Gasoline	**ND**	6.3	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*58-129*				
Client ID:	**GP-4-7.8-8.7**					
Laboratory ID:	10-327-13					
Gasoline	**ND**	11	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*90*	*58-129*				
Client ID:	**GP-4-15-18.7**					
Laboratory ID:	10-327-14					
Gasoline	**ND**	8.0	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*115*	*58-129*				
Client ID:	**GP-3-14.4-15.9**					
Laboratory ID:	10-327-16					
Gasoline	**ND**	6.6	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*58-129*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

GASOLINE RANGE ORGANICS
NWTPH-Gx
QUALITY CONTROL

Matrix: Solid
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1029S1					
Gasoline	**ND**	5.0	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*58-129*				
Laboratory ID:	MB1029S2					
Gasoline	**ND**	5.0	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*58-129*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-327-10										
	ORIG	DUP									
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*106*	*108*	*58-129*			
Laboratory ID:	10-349-01										
	ORIG	DUP									
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*96*	*96*	*58-129*			

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-6-GW**					
Laboratory ID:	10-327-12					
Gasoline	**ND**	100	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*83*	*65-120*				
Client ID:	**GP-3-GW**					
Laboratory ID:	10-327-17					
Gasoline	**ND**	100	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*83*	*65-120*				
Client ID:	**GP-3-GW-Dup**					
Laboratory ID:	10-327-18					
Gasoline	**ND**	100	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*83*	*65-120*				
Client ID:	**TB-201026**					
Laboratory ID:	10-327-19					
Gasoline	**ND**	100	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*86*	*65-120*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

GASOLINE RANGE ORGANICS
NWTPH-Gx
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1029W1					
Gasoline	**ND**	100	NWTPH-Gx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*84*	*65-120*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-327-17										
	ORIG	DUP									
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*83*	*83*	*65-120*			

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-2-8-9**					
Laboratory ID:	10-327-01					
Diesel Range Organics	**ND**	33	NWTPH-Dx	11-2-20	11-2-20	
Lube Oil Range Organics	**ND**	67	NWTPH-Dx	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*85*	*50-150*				
Client ID:	**GP-2-25-27**					
Laboratory ID:	10-327-03					
Diesel Range Organics	**ND**	33	NWTPH-Dx	11-2-20	11-2-20	
Lube Oil Range Organics	**ND**	66	NWTPH-Dx	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*86*	*50-150*				
Client ID:	**GP-1-5.7-9.7**					
Laboratory ID:	10-327-04					
Diesel Range Organics	**ND**	32	NWTPH-Dx	11-2-20	11-2-20	
Lube Oil Range Organics	**ND**	64	NWTPH-Dx	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*79*	*50-150*				
Client ID:	**GP-1-20-22**					
Laboratory ID:	10-327-06					
Diesel Range Organics	**ND**	34	NWTPH-Dx	11-2-20	11-2-20	
Lube Oil Range Organics	**ND**	69	NWTPH-Dx	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*75*	*50-150*				
Client ID:	**GP-1-20-22-Dup**					
Laboratory ID:	10-327-07					
Diesel Range Organics	**ND**	35	NWTPH-Dx	11-2-20	11-2-20	
Lube Oil Range Organics	**ND**	70	NWTPH-Dx	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*78*	*50-150*				
Client ID:	**GP-5-6.9-7.5**					
Laboratory ID:	10-327-08					
Diesel Range Organics	**ND**	32	NWTPH-Dx	11-2-20	11-2-20	
Lube Oil Range Organics	**ND**	63	NWTPH-Dx	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*84*	*50-150*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-5-20-22**					
Laboratory ID:	10-327-10					
Diesel Range Organics	**ND**	31	NWTPH-Dx	11-2-20	11-2-20	
Lube Oil Range Organics	**ND**	62	NWTPH-Dx	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*92*	*50-150*				
Client ID:	**GP-6-10.8-15**					
Laboratory ID:	10-327-11					
Diesel Range Organics	**ND**	31	NWTPH-Dx	11-2-20	11-2-20	
Lube Oil Range Organics	**ND**	63	NWTPH-Dx	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*87*	*50-150*				
Client ID:	**GP-4-7.8-8.7**					
Laboratory ID:	10-327-13					
Diesel Range Organics	**ND**	38	NWTPH-Dx	11-2-20	11-2-20	
Lube Oil Range Organics	**ND**	76	NWTPH-Dx	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*80*	*50-150*				
Client ID:	**GP-4-15-18.7**					
Laboratory ID:	10-327-14					
Diesel Range Organics	**ND**	35	NWTPH-Dx	11-2-20	11-2-20	
Lube Oil Range Organics	**ND**	69	NWTPH-Dx	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*83*	*50-150*				
Client ID:	**GP-3-14.4-15.9**					
Laboratory ID:	10-327-16					
Diesel Range Organics	**ND**	30	NWTPH-Dx	11-6-20	11-6-20	
Lube Oil Range Organics	**ND**	60	NWTPH-Dx	11-6-20	11-6-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*105*	*50-150*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1102S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	11-2-20	11-2-20	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*92*	*50-150*				
Laboratory ID:	MB1106S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	11-6-20	11-6-20	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	11-6-20	11-6-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*106*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-327-10										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*92*	*74*	*50-150*			
Laboratory ID:	SB1102S1										
	ORIG	DUP									
Diesel Fuel #2	**100**	**94.0**	NA	NA		NA		NA	6	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*100*	*91*	*50-150*			
Laboratory ID:	SB1106S1										
	ORIG	DUP									
Diesel Fuel #2	**91.0**	**85.2**	NA	NA		NA		NA	7	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*102*	*98*	*50-150*			

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-6-GW**					
Laboratory ID:	10-327-12					
Diesel Range Organics	**ND**	0.10	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*86*	*50-150*				
Client ID:	**GP-3-GW**					
Laboratory ID:	10-327-17					
Diesel Range Organics	**0.12**	0.10	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**0.29**	0.20	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**GP-3-GW-Dup**					
Laboratory ID:	10-327-18					
Diesel Range Organics	**0.11**	0.10	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**0.27**	0.20	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1029W1					
Diesel Range Organics	**ND**	0.10	NWTPH-Dx	10-29-20	10-29-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	10-29-20	10-29-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*90*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-327-17										
	ORIG	DUP									
Diesel Range Organics	**0.120**	**0.0927**	NA	NA		NA		NA	26	NA	
Lube Oil Range Organics	**0.287**	**0.221**	NA	NA		NA		NA	26	NA	
Surrogate:											
o-Terphenyl						*97*	*81*	*50-150*			

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-2-8-9**					
Laboratory ID:	10-327-01					
Naphthalene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
2-Methylnaphthalene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
1-Methylnaphthalene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthylene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Fluorene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Phenanthrene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Anthracene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Fluoranthene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Pyrene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]anthracene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Chrysene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[b]fluoranthene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo(j,k)fluoranthene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]pyrene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Dibenz[a,h]anthracene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[g,h,i]perylene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*48*	*46 - 113*				
Pyrene-d10	*52*	*45 - 114*				
Terphenyl-d14	*54*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-2-25-27**					
Laboratory ID:	10-327-03					
Naphthalene	**0.0078**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
2-Methylnaphthalene	**0.013**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
1-Methylnaphthalene	**0.0084**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthylene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthene	**0.024**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Fluorene	**0.037**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Phenanthrene	**0.11**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Anthracene	**0.025**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Fluoranthene	**0.20**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Pyrene	**0.14**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]anthracene	**0.066**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Chrysene	**0.065**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[b]fluoranthene	**0.055**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo(j,k)fluoranthene	**0.016**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]pyrene	**0.021**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Indeno(1,2,3-c,d)pyrene	**0.0058**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Dibenz[a,h]anthracene	**ND**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[g,h,i]perylene	**0.0048**	0.0044	EPA 8270E/SIM	11-3-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*90*	*46 - 113*				
Pyrene-d10	*102*	*45 - 114*				
Terphenyl-d14	*101*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-5.7-9.7**					
Laboratory ID:	10-327-04					
Naphthalene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
2-Methylnaphthalene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
1-Methylnaphthalene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthylene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Fluorene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Phenanthrene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Anthracene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Fluoranthene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Pyrene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]anthracene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Chrysene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[b]fluoranthene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo(j,k)fluoranthene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]pyrene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Dibenz[a,h]anthracene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[g,h,i]perylene	**ND**	0.0043	EPA 8270E/SIM	11-3-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*85*	*46 - 113*				
Pyrene-d10	*97*	*45 - 114*				
Terphenyl-d14	*100*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-20-22**					
Laboratory ID:	10-327-06					
Naphthalene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
2-Methylnaphthalene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
1-Methylnaphthalene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthylene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Fluorene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Phenanthrene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Anthracene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Fluoranthene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Pyrene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]anthracene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Chrysene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[b]fluoranthene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo(j,k)fluoranthene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]pyrene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Dibenz[a,h]anthracene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[g,h,i]perylene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*93*	*46 - 113*				
Pyrene-d10	*104*	*45 - 114*				
Terphenyl-d14	*106*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-20-22-Dup**					
Laboratory ID:	10-327-07					
Naphthalene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
2-Methylnaphthalene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
1-Methylnaphthalene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Acenaphthylene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Acenaphthene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Fluorene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Phenanthrene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Anthracene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Fluoranthene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Pyrene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[a]anthracene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Chrysene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[b]fluoranthene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo(j,k)fluoranthene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[a]pyrene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Dibenz[a,h]anthracene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[g,h,i]perylene	**ND**	0.0047	EPA 8270E/SIM	11-3-20	11-3-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*53*	*46 - 113*				
Pyrene-d10	*60*	*45 - 114*				
Terphenyl-d14	*62*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-5-6.9-7.5**					
Laboratory ID:	10-327-08					
Naphthalene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
2-Methylnaphthalene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
1-Methylnaphthalene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Acenaphthylene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Acenaphthene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Fluorene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Phenanthrene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Anthracene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Fluoranthene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Pyrene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[a]anthracene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Chrysene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[b]fluoranthene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo(j,k)fluoranthene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[a]pyrene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Dibenz[a,h]anthracene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[g,h,i]perylene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-3-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*50*	*46 - 113*				
Pyrene-d10	*58*	*45 - 114*				
Terphenyl-d14	*60*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-5-20-22**					
Laboratory ID:	10-327-10					
Naphthalene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
2-Methylnaphthalene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
1-Methylnaphthalene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthylene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Fluorene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Phenanthrene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Anthracene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Fluoranthene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Pyrene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]anthracene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Chrysene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[b]fluoranthene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo(j,k)fluoranthene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]pyrene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Dibenz[a,h]anthracene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[g,h,i]perylene	**ND**	0.0041	EPA 8270E/SIM	11-3-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*92*	*46 - 113*				
Pyrene-d10	*101*	*45 - 114*				
Terphenyl-d14	*99*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-6-10.8-15**					
Laboratory ID:	10-327-11					
Naphthalene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
2-Methylnaphthalene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
1-Methylnaphthalene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthylene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Fluorene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Phenanthrene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Anthracene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Fluoranthene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Pyrene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]anthracene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Chrysene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[b]fluoranthene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo(j,k)fluoranthene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]pyrene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Dibenz[a,h]anthracene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[g,h,i]perylene	**ND**	0.0042	EPA 8270E/SIM	11-3-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*54*	*46 - 113*				
Pyrene-d10	*56*	*45 - 114*				
Terphenyl-d14	*57*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-4-7.8-8.7**					
Laboratory ID:	10-327-13					
Naphthalene	**0.043**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
2-Methylnaphthalene	**0.050**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
1-Methylnaphthalene	**0.042**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthylene	**ND**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthene	**ND**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Fluorene	**ND**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Phenanthrene	**0.028**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Anthracene	**0.0053**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Fluoranthene	**0.010**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Pyrene	**0.0094**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]anthracene	**0.013**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Chrysene	**0.020**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[b]fluoranthene	**0.015**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo(j,k)fluoranthene	**ND**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]pyrene	**0.013**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Indeno(1,2,3-c,d)pyrene	**0.0077**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Dibenz[a,h]anthracene	**0.0047**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[g,h,i]perylene	**0.012**	0.0040	EPA 8270E/SIM	11-3-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*79*	*46 - 113*				
Pyrene-d10	*55*	*45 - 114*				
Terphenyl-d14	*75*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-4-15-18.7**					
Laboratory ID:	10-327-14					
Naphthalene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
2-Methylnaphthalene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
1-Methylnaphthalene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthylene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Acenaphthene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Fluorene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Phenanthrene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Anthracene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Fluoranthene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Pyrene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]anthracene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Chrysene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[b]fluoranthene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo(j,k)fluoranthene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[a]pyrene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Dibenz[a,h]anthracene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Benzo[g,h,i]perylene	**ND**	0.0046	EPA 8270E/SIM	11-3-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*50*	*46 - 113*				
Pyrene-d10	*50*	*45 - 114*				
Terphenyl-d14	*51*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-3-14.4-15.9**					
Laboratory ID:	10-327-16					
Naphthalene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
2-Methylnaphthalene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
1-Methylnaphthalene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Acenaphthylene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Acenaphthene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Fluorene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Phenanthrene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Anthracene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Fluoranthene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Pyrene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Benzo[a]anthracene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Chrysene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Benzo[b]fluoranthene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Benzo(j,k)fluoranthene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Benzo[a]pyrene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Dibenz[a,h]anthracene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Benzo[g,h,i]perylene	**ND**	0.0040	EPA 8270E/SIM	11-6-20	11-6-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*67*	*46 - 113*				
Pyrene-d10	*83*	*45 - 114*				
Terphenyl-d14	*86*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1103S1					
Naphthalene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
2-Methylnaphthalene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
1-Methylnaphthalene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Acenaphthylene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Acenaphthene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Fluorene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Phenanthrene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Anthracene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Fluoranthene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Pyrene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[a]anthracene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Chrysene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[b]fluoranthene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo(j,k)fluoranthene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[a]pyrene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Dibenz[a,h]anthracene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Benzo[g,h,i]perylene	**ND**	0.0027	EPA 8270E/SIM	11-3-20	11-3-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*61*	*46 - 113*				
Pyrene-d10	*58*	*45 - 114*				
Terphenyl-d14	*56*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1106S1					
Naphthalene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
2-Methylnaphthalene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
1-Methylnaphthalene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Acenaphthylene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Acenaphthene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Fluorene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Phenanthrene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Anthracene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Fluoranthene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Pyrene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Benzo[a]anthracene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Chrysene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Benzo[b]fluoranthene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Benzo(j,k)fluoranthene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Benzo[a]pyrene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Dibenz[a,h]anthracene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Benzo[g,h,i]perylene	**ND**	0.0033	EPA 8270E/SIM	11-6-20	11-6-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*84*	*46 - 113*				
Pyrene-d10	*106*	*45 - 114*				
Terphenyl-d14	*95*	*49 - 121*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-327-10										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	**0.0710**	**0.0687**	0.0833	0.0833	ND	85	82	51 - 115	3	26	
Acenaphthylene	**0.0733**	**0.0704**	0.0833	0.0833	ND	88	85	53 - 121	4	24	
Acenaphthene	**0.0729**	**0.0707**	0.0833	0.0833	ND	88	85	52 - 121	3	25	
Fluorene	**0.0787**	**0.0800**	0.0833	0.0833	ND	94	96	58 - 127	2	23	
Phenanthrene	**0.0779**	**0.0754**	0.0833	0.0833	ND	94	91	46 - 129	3	28	
Anthracene	**0.0802**	**0.0781**	0.0833	0.0833	ND	96	94	57 - 124	3	21	
Fluoranthene	**0.0829**	**0.0843**	0.0833	0.0833	ND	100	101	46 - 136	2	29	
Pyrene	**0.0775**	**0.0823**	0.0833	0.0833	ND	93	99	41 - 136	6	32	
Benzo[a]anthracene	**0.0804**	**0.0845**	0.0833	0.0833	ND	97	101	56 - 136	5	25	
Chrysene	**0.0790**	**0.0777**	0.0833	0.0833	ND	95	93	49 - 130	2	22	
Benzo[b]fluoranthene	**0.0792**	**0.0869**	0.0833	0.0833	ND	95	104	51 - 135	9	26	
Benzo(j,k)fluoranthene	**0.0769**	**0.0730**	0.0833	0.0833	ND	92	88	56 - 124	5	23	
Benzo[a]pyrene	**0.0777**	**0.0798**	0.0833	0.0833	ND	93	96	54 - 133	3	26	
Indeno(1,2,3-c,d)pyrene	**0.0804**	**0.0821**	0.0833	0.0833	ND	97	99	52 - 134	2	20	
Dibenz[a,h]anthracene	**0.0788**	**0.0784**	0.0833	0.0833	ND	95	94	58 - 127	1	17	
Benzo[g,h,i]perylene	**0.0787**	**0.0784**	0.0833	0.0833	ND	94	94	54 - 129	0	21	
Surrogate:											
2-Fluorobiphenyl						*88*	*84*	*46 - 113*			
Pyrene-d10						*96*	*98*	*45 - 114*			
Terphenyl-d14						*95*	*102*	*49 - 121*			

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1106S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0752**	**0.0705**	0.0833	0.0833	90	85	60 - 116	6	16	
Acenaphthylene	**0.0794**	**0.0800**	0.0833	0.0833	95	96	60 - 125	1	15	
Acenaphthene	**0.0789**	**0.0776**	0.0833	0.0833	95	93	60 - 121	2	15	
Fluorene	**0.0802**	**0.0803**	0.0833	0.0833	96	96	65 - 126	0	15	
Phenanthrene	**0.0806**	**0.0801**	0.0833	0.0833	97	96	65 - 120	1	15	
Anthracene	**0.0796**	**0.0811**	0.0833	0.0833	96	97	67 - 125	2	15	
Fluoranthene	**0.0854**	**0.0829**	0.0833	0.0833	103	100	66 - 125	3	15	
Pyrene	**0.0838**	**0.0820**	0.0833	0.0833	101	98	62 - 125	2	15	
Benzo[a]anthracene	**0.0884**	**0.0859**	0.0833	0.0833	106	103	72 - 129	3	15	
Chrysene	**0.0845**	**0.0835**	0.0833	0.0833	101	100	66 - 123	1	15	
Benzo[b]fluoranthene	**0.0867**	**0.0859**	0.0833	0.0833	104	103	68 - 128	1	15	
Benzo(j,k)fluoranthene	**0.0825**	**0.0784**	0.0833	0.0833	99	94	63 - 128	5	16	
Benzo[a]pyrene	**0.0829**	**0.0792**	0.0833	0.0833	100	95	66 - 130	5	15	
Indeno(1,2,3-c,d)pyrene	**0.0754**	**0.0807**	0.0833	0.0833	91	97	63 - 135	7	15	
Dibenz[a,h]anthracene	**0.0704**	**0.0760**	0.0833	0.0833	85	91	65 - 130	8	15	
Benzo[g,h,i]perylene	**0.0729**	**0.0775**	0.0833	0.0833	88	93	66 - 127	6	15	
Surrogate:										
2-Fluorobiphenyl					*98*	*90*	*46 - 113*			
Pyrene-d10					*95*	*94*	*45 - 114*			
Terphenyl-d14					*103*	*106*	*49 - 121*			

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
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Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-6-GW**					
Laboratory ID:	10-327-12					
Naphthalene	**ND**	0.060	EPA 8270E/SIM	11-2-20	11-2-20	
2-Methylnaphthalene	**ND**	0.060	EPA 8270E/SIM	11-2-20	11-2-20	
1-Methylnaphthalene	**ND**	0.060	EPA 8270E/SIM	11-2-20	11-2-20	
Acenaphthylene	**ND**	0.060	EPA 8270E/SIM	11-2-20	11-2-20	
Acenaphthene	**ND**	0.060	EPA 8270E/SIM	11-2-20	11-2-20	
Fluorene	**ND**	0.060	EPA 8270E/SIM	11-2-20	11-2-20	
Phenanthrene	**ND**	0.060	EPA 8270E/SIM	11-2-20	11-2-20	
Anthracene	**ND**	0.060	EPA 8270E/SIM	11-2-20	11-2-20	
Fluoranthene	**ND**	0.060	EPA 8270E/SIM	11-2-20	11-2-20	
Pyrene	**ND**	0.060	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[a]anthracene	**ND**	0.0060	EPA 8270E/SIM	11-2-20	11-2-20	
Chrysene	**ND**	0.0060	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[b]fluoranthene	**ND**	0.0060	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo(j,k)fluoranthene	**ND**	0.0060	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[a]pyrene	**ND**	0.0060	EPA 8270E/SIM	11-2-20	11-2-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0060	EPA 8270E/SIM	11-2-20	11-2-20	
Dibenz[a,h]anthracene	**ND**	0.0060	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[g,h,i]perylene	**ND**	0.0060	EPA 8270E/SIM	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*52*	*20 - 106*				
Pyrene-d10	*65*	*26 - 104*				
Terphenyl-d14	*64*	*44 - 127*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-3-GW**					
Laboratory ID:	10-327-17					
Naphthalene	**ND**	0.056	EPA 8270E/SIM	11-2-20	11-2-20	
2-Methylnaphthalene	**ND**	0.056	EPA 8270E/SIM	11-2-20	11-2-20	
1-Methylnaphthalene	**ND**	0.056	EPA 8270E/SIM	11-2-20	11-2-20	
Acenaphthylene	**ND**	0.056	EPA 8270E/SIM	11-2-20	11-2-20	
Acenaphthene	**ND**	0.056	EPA 8270E/SIM	11-2-20	11-2-20	
Fluorene	**ND**	0.056	EPA 8270E/SIM	11-2-20	11-2-20	
Phenanthrene	**ND**	0.056	EPA 8270E/SIM	11-2-20	11-2-20	
Anthracene	**ND**	0.056	EPA 8270E/SIM	11-2-20	11-2-20	
Fluoranthene	**ND**	0.056	EPA 8270E/SIM	11-2-20	11-2-20	
Pyrene	**ND**	0.056	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[a]anthracene	**ND**	0.0056	EPA 8270E/SIM	11-2-20	11-2-20	
Chrysene	**ND**	0.0056	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[b]fluoranthene	**ND**	0.0056	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo(j,k)fluoranthene	**ND**	0.0056	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[a]pyrene	**ND**	0.0056	EPA 8270E/SIM	11-2-20	11-2-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0056	EPA 8270E/SIM	11-2-20	11-2-20	
Dibenz[a,h]anthracene	**ND**	0.0056	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[g,h,i]perylene	**ND**	0.0056	EPA 8270E/SIM	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*47*	*20 - 106*				
Pyrene-d10	*61*	*26 - 104*				
Terphenyl-d14	*62*	*44 - 127*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-3-GW-Dup**					
Laboratory ID:	10-327-18					
Naphthalene	**ND**	0.051	EPA 8270E/SIM	11-2-20	11-2-20	
2-Methylnaphthalene	**ND**	0.051	EPA 8270E/SIM	11-2-20	11-2-20	
1-Methylnaphthalene	**ND**	0.051	EPA 8270E/SIM	11-2-20	11-2-20	
Acenaphthylene	**ND**	0.051	EPA 8270E/SIM	11-2-20	11-2-20	
Acenaphthene	**ND**	0.051	EPA 8270E/SIM	11-2-20	11-2-20	
Fluorene	**ND**	0.051	EPA 8270E/SIM	11-2-20	11-2-20	
Phenanthrene	**ND**	0.051	EPA 8270E/SIM	11-2-20	11-2-20	
Anthracene	**ND**	0.051	EPA 8270E/SIM	11-2-20	11-2-20	
Fluoranthene	**ND**	0.051	EPA 8270E/SIM	11-2-20	11-2-20	
Pyrene	**ND**	0.051	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[a]anthracene	**ND**	0.0051	EPA 8270E/SIM	11-2-20	11-2-20	
Chrysene	**ND**	0.0051	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[b]fluoranthene	**0.0053**	0.0051	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo(j,k)fluoranthene	**ND**	0.0051	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[a]pyrene	**ND**	0.0051	EPA 8270E/SIM	11-2-20	11-2-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0051	EPA 8270E/SIM	11-2-20	11-2-20	
Dibenz[a,h]anthracene	**ND**	0.0051	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[g,h,i]perylene	**ND**	0.0051	EPA 8270E/SIM	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*62*	*20 - 106*				
Pyrene-d10	*70*	*26 - 104*				
Terphenyl-d14	*72*	*44 - 127*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1102W1					
Naphthalene	**ND**	0.050	EPA 8270E/SIM	11-2-20	11-2-20	
2-Methylnaphthalene	**ND**	0.050	EPA 8270E/SIM	11-2-20	11-2-20	
1-Methylnaphthalene	**ND**	0.050	EPA 8270E/SIM	11-2-20	11-2-20	
Acenaphthylene	**ND**	0.050	EPA 8270E/SIM	11-2-20	11-2-20	
Acenaphthene	**ND**	0.050	EPA 8270E/SIM	11-2-20	11-2-20	
Fluorene	**ND**	0.050	EPA 8270E/SIM	11-2-20	11-2-20	
Phenanthrene	**ND**	0.050	EPA 8270E/SIM	11-2-20	11-2-20	
Anthracene	**ND**	0.050	EPA 8270E/SIM	11-2-20	11-2-20	
Fluoranthene	**ND**	0.050	EPA 8270E/SIM	11-2-20	11-2-20	
Pyrene	**ND**	0.050	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[a]anthracene	**ND**	0.0050	EPA 8270E/SIM	11-2-20	11-2-20	
Chrysene	**ND**	0.0050	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[b]fluoranthene	**ND**	0.0050	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo(j,k)fluoranthene	**ND**	0.0050	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[a]pyrene	**ND**	0.0050	EPA 8270E/SIM	11-2-20	11-2-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0050	EPA 8270E/SIM	11-2-20	11-2-20	
Dibenz[a,h]anthracene	**ND**	0.0050	EPA 8270E/SIM	11-2-20	11-2-20	
Benzo[g,h,i]perylene	**ND**	0.0050	EPA 8270E/SIM	11-2-20	11-2-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*47*	*20 - 106*				
Pyrene-d10	*65*	*26 - 104*				
Terphenyl-d14	*63*	*44 - 127*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-327-17										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	**0.283**	**0.250**	0.552	0.521	ND	51	48	30 - 98	12	40	
Acenaphthylene	**0.326**	**0.295**	0.552	0.521	ND	59	57	39 - 106	10	28	
Acenaphthene	**0.348**	**0.313**	0.552	0.521	ND	63	60	36 - 114	11	35	
Fluorene	**0.361**	**0.339**	0.552	0.521	ND	65	65	45 - 112	6	29	
Phenanthrene	**0.401**	**0.373**	0.552	0.521	ND	73	72	51 - 109	7	23	
Anthracene	**0.348**	**0.324**	0.552	0.521	ND	63	62	49 - 109	7	22	
Fluoranthene	**0.378**	**0.349**	0.552	0.521	ND	68	67	53 - 115	8	20	
Pyrene	**0.376**	**0.346**	0.552	0.521	ND	68	66	49 - 129	8	27	
Benzo[a]anthracene	**0.513**	**0.462**	0.552	0.521	ND	93	89	61 - 123	10	20	
Chrysene	**0.427**	**0.382**	0.552	0.521	ND	77	73	59 - 114	11	22	
Benzo[b]fluoranthene	**0.427**	**0.404**	0.552	0.521	ND	77	78	60 - 125	6	24	
Benzo(j,k)fluoranthene	**0.436**	**0.354**	0.552	0.521	ND	79	68	58 - 121	21	23	
Benzo[a]pyrene	**0.393**	**0.350**	0.552	0.521	ND	71	67	58 - 118	12	23	
Indeno(1,2,3-c,d)pyrene	**0.450**	**0.407**	0.552	0.521	ND	82	78	59 - 124	10	23	
Dibenz[a,h]anthracene	**0.443**	**0.393**	0.552	0.521	ND	80	75	59 - 123	12	23	
Benzo[g,h,i]perylene	**0.431**	**0.383**	0.552	0.521	ND	78	74	58 - 120	12	23	
Surrogate:											
2-Fluorobiphenyl						*47*	*44*	*20 - 106*			
Pyrene-d10						*63*	*62*	*26 - 104*			
Terphenyl-d14						*64*	*61*	*44 - 127*			

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PCBs EPA 8082A

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-5.7-9.7**					
Laboratory ID:	10-327-04					
Aroclor 1016	**ND**	0.032	EPA 8082A	11-4-20	11-5-20	
Aroclor 1221	**ND**	0.032	EPA 8082A	11-4-20	11-5-20	
Aroclor 1232	**ND**	0.032	EPA 8082A	11-4-20	11-5-20	
Aroclor 1242	**ND**	0.032	EPA 8082A	11-4-20	11-5-20	
Aroclor 1248	**ND**	0.032	EPA 8082A	11-4-20	11-5-20	
Aroclor 1254	**ND**	0.032	EPA 8082A	11-4-20	11-5-20	
Aroclor 1260	**ND**	0.032	EPA 8082A	11-4-20	11-5-20	
Aroclor 1262	**ND**	0.032	EPA 8082A	11-4-20	11-5-20	
Aroclor 1268	**ND**	0.032	EPA 8082A	11-4-20	11-5-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*76*	*46-125*				

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

PCBs EPA 8082A
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1104S1					
Aroclor 1016	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1221	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1232	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1242	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1248	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1254	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1260	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1262	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Aroclor 1268	**ND**	0.025	EPA 8082A	11-4-20	11-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*98*	*46-125*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-279-02										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	**0.224**	**0.292**	0.250	0.250	ND	**89**	**117**	43-125	26	15	L, X
Surrogate:											
DCB						*102*	*102*	*46-125*			
SPIKE BLANKS											
Laboratory ID:	SB1104S1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	**0.280**	**0.260**	0.250	0.250	N/A	**112**	**104**	50-134	7	18	
Surrogate:											
DCB						*96*	*96*	*46-125*			

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-2-8-9**					
Laboratory ID:	10-327-01					
Antimony	**ND**	3.3	EPA 6010D	11-2-20	11-2-20	
Arsenic	**9.8**	3.3	EPA 6010D	11-2-20	11-2-20	
Beryllium	**0.43**	0.067	EPA 6020B	11-4-20	11-5-20	
Cadmium	**0.077**	0.067	EPA 6020B	11-4-20	11-5-20	
Chromium	**60**	0.67	EPA 6010D	11-2-20	11-2-20	
Copper	**49**	1.3	EPA 6010D	11-2-20	11-2-20	
Lead	**4.8**	0.67	EPA 6020B	11-4-20	11-5-20	
Mercury	**0.085**	0.013	EPA 7471B	11-4-20	11-5-20	
Nickel	**58**	3.3	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	3.3	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.17	EPA 6020B	11-4-20	11-5-20	
Thallium	**ND**	3.3	EPA 6010D	11-2-20	11-2-20	
Zinc	**72**	3.3	EPA 6010D	11-2-20	11-2-20	
Client ID:	**GP-2-25-27**					
Laboratory ID:	10-327-03					
Antimony	**ND**	3.3	EPA 6010D	11-2-20	11-2-20	
Arsenic	**5.3**	3.3	EPA 6010D	11-2-20	11-2-20	
Beryllium	**0.15**	0.066	EPA 6020B	11-4-20	11-5-20	
Cadmium	**0.12**	0.066	EPA 6020B	11-4-20	11-5-20	
Chromium	**31**	0.66	EPA 6010D	11-2-20	11-2-20	
Copper	**21**	1.3	EPA 6010D	11-2-20	11-2-20	
Lead	**2.9**	0.66	EPA 6020B	11-4-20	11-5-20	
Mercury	**0.038**	0.013	EPA 7471B	11-4-20	11-5-20	
Nickel	**29**	3.3	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	3.3	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.16	EPA 6020B	11-4-20	11-5-20	
Thallium	**ND**	3.3	EPA 6010D	11-2-20	11-2-20	
Zinc	**42**	3.3	EPA 6010D	11-2-20	11-2-20	

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-5.7-9.7**					
Laboratory ID:	10-327-04					
Antimony	**ND**	3.2	EPA 6010D	11-2-20	11-2-20	
Arsenic	**9.3**	3.2	EPA 6010D	11-2-20	11-2-20	
Beryllium	**0.33**	0.064	EPA 6020B	11-4-20	11-5-20	
Cadmium	**ND**	0.064	EPA 6020B	11-4-20	11-5-20	
Chromium	**55**	0.64	EPA 6010D	11-2-20	11-2-20	
Copper	**48**	1.3	EPA 6010D	11-2-20	11-2-20	
Lead	**3.2**	0.64	EPA 6020B	11-4-20	11-5-20	
Mercury	**0.062**	0.013	EPA 7471B	11-4-20	11-5-20	
Nickel	**58**	3.2	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	3.2	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.16	EPA 6020B	11-4-20	11-5-20	
Thallium	**ND**	3.2	EPA 6010D	11-2-20	11-2-20	
Zinc	**64**	3.2	EPA 6010D	11-2-20	11-2-20	
Client ID:	**GP-1-20-22**					
Laboratory ID:	10-327-06					
Antimony	**ND**	3.4	EPA 6010D	11-2-20	11-2-20	
Arsenic	**6.0**	3.4	EPA 6010D	11-2-20	11-2-20	
Beryllium	**0.18**	0.068	EPA 6020B	11-4-20	11-5-20	
Cadmium	**0.13**	0.068	EPA 6020B	11-4-20	11-5-20	
Chromium	**42**	0.68	EPA 6010D	11-2-20	11-2-20	
Copper	**35**	1.4	EPA 6010D	11-2-20	11-2-20	
Lead	**2.0**	0.68	EPA 6020B	11-4-20	11-5-20	
Mercury	**0.037**	0.014	EPA 7471B	11-4-20	11-5-20	
Nickel	**46**	3.4	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	3.4	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.17	EPA 6020B	11-4-20	11-5-20	
Thallium	**ND**	3.4	EPA 6010D	11-2-20	11-2-20	
Zinc	**64**	3.4	EPA 6010D	11-2-20	11-2-20	

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-20-22-Dup**					
Laboratory ID:	10-327-07					
Antimony	**ND**	3.5	EPA 6010D	11-2-20	11-2-20	
Arsenic	**6.3**	3.5	EPA 6010D	11-2-20	11-2-20	
Beryllium	**0.19**	0.070	EPA 6020B	11-4-20	11-5-20	
Cadmium	**0.11**	0.070	EPA 6020B	11-4-20	11-5-20	
Chromium	**44**	0.70	EPA 6010D	11-2-20	11-2-20	
Copper	**35**	1.4	EPA 6010D	11-2-20	11-2-20	
Lead	**2.0**	0.70	EPA 6020B	11-4-20	11-5-20	
Mercury	**0.045**	0.014	EPA 7471B	11-4-20	11-5-20	
Nickel	**46**	3.5	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	3.5	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.18	EPA 6020B	11-4-20	11-5-20	
Thallium	**ND**	3.5	EPA 6010D	11-2-20	11-2-20	
Zinc	**62**	3.5	EPA 6010D	11-2-20	11-2-20	
Client ID:	**GP-5-6.9-7.5**					
Laboratory ID:	10-327-08					
Antimony	**ND**	3.2	EPA 6010D	11-2-20	11-2-20	
Arsenic	**7.5**	3.2	EPA 6010D	11-2-20	11-2-20	
Beryllium	**0.36**	0.063	EPA 6020B	11-4-20	11-5-20	
Cadmium	**0.093**	0.063	EPA 6020B	11-4-20	11-5-20	
Chromium	**43**	0.63	EPA 6010D	11-2-20	11-2-20	
Copper	**22**	1.3	EPA 6010D	11-2-20	11-2-20	
Lead	**4.7**	0.63	EPA 6020B	11-4-20	11-5-20	
Mercury	**0.059**	0.013	EPA 7471B	11-4-20	11-5-20	
Nickel	**33**	3.2	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	3.2	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.16	EPA 6020B	11-4-20	11-5-20	
Thallium	**ND**	3.2	EPA 6010D	11-2-20	11-2-20	
Zinc	**61**	3.2	EPA 6010D	11-2-20	11-2-20	

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TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-5-20-22**					
Laboratory ID:	10-327-10					
Antimony	**ND**	3.1	EPA 6010D	11-2-20	11-2-20	
Arsenic	**5.0**	3.1	EPA 6010D	11-2-20	11-2-20	
Beryllium	**0.16**	0.062	EPA 6020B	11-4-20	11-5-20	
Cadmium	**0.093**	0.062	EPA 6020B	11-4-20	11-5-20	
Chromium	**31**	0.62	EPA 6010D	11-2-20	11-2-20	
Copper	**19**	1.2	EPA 6010D	11-2-20	11-2-20	
Lead	**2.0**	0.62	EPA 6020B	11-4-20	11-5-20	
Mercury	**0.024**	0.012	EPA 7471B	11-4-20	11-5-20	
Nickel	**28**	3.1	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	3.1	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.15	EPA 6020B	11-4-20	11-5-20	
Thallium	**ND**	3.1	EPA 6010D	11-2-20	11-2-20	
Zinc	**36**	3.1	EPA 6010D	11-2-20	11-2-20	
Client ID:	**GP-6-10.8-15**					
Laboratory ID:	10-327-11					
Antimony	**ND**	3.1	EPA 6010D	11-2-20	11-2-20	
Arsenic	**3.6**	3.1	EPA 6010D	11-2-20	11-2-20	
Beryllium	**0.13**	0.063	EPA 6020B	11-4-20	11-5-20	
Cadmium	**0.092**	0.063	EPA 6020B	11-4-20	11-5-20	
Chromium	**27**	0.63	EPA 6010D	11-2-20	11-2-20	
Copper	**15**	1.3	EPA 6010D	11-2-20	11-2-20	
Lead	**1.4**	0.63	EPA 6020B	11-4-20	11-5-20	
Mercury	**0.022**	0.013	EPA 7471B	11-4-20	11-5-20	
Nickel	**28**	3.1	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	3.1	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.16	EPA 6020B	11-4-20	11-5-20	
Thallium	**ND**	3.1	EPA 6010D	11-2-20	11-2-20	
Zinc	**29**	3.1	EPA 6010D	11-2-20	11-2-20	

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TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-4-7.8-8.7**					
Laboratory ID:	10-327-13					
Antimony	**4.6**	3.8	EPA 6010D	11-2-20	11-2-20	
Arsenic	**14**	3.8	EPA 6010D	11-2-20	11-2-20	
Beryllium	**0.37**	0.076	EPA 6020B	11-4-20	11-5-20	
Cadmium	**0.90**	0.076	EPA 6020B	11-4-20	11-5-20	
Chromium	**37**	0.76	EPA 6010D	11-2-20	11-2-20	
Copper	**30**	1.5	EPA 6010D	11-2-20	11-2-20	
Lead	**44**	1.5	EPA 6020B	11-4-20	11-5-20	
Mercury	**0.095**	0.015	EPA 7471B	11-4-20	11-5-20	
Nickel	**38**	3.8	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	3.8	EPA 6010D	11-2-20	11-2-20	
Silver	**0.22**	0.19	EPA 6020B	11-4-20	11-5-20	
Thallium	**ND**	3.8	EPA 6010D	11-2-20	11-2-20	
Zinc	**120**	3.8	EPA 6010D	11-2-20	11-2-20	
Client ID:	**GP-4-15-18.7**					
Laboratory ID:	10-327-14					
Antimony	**ND**	3.4	EPA 6010D	11-2-20	11-2-20	
Arsenic	**6.0**	3.4	EPA 6010D	11-2-20	11-2-20	
Beryllium	**0.21**	0.068	EPA 6020B	11-4-20	11-5-20	
Cadmium	**0.13**	0.068	EPA 6020B	11-4-20	11-5-20	
Chromium	**41**	0.68	EPA 6010D	11-2-20	11-2-20	
Copper	**28**	1.4	EPA 6010D	11-2-20	11-2-20	
Lead	**2.4**	0.68	EPA 6020B	11-4-20	11-5-20	
Mercury	**0.030**	0.014	EPA 7471B	11-4-20	11-5-20	
Nickel	**39**	3.4	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	3.4	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.17	EPA 6020B	11-4-20	11-5-20	
Thallium	**ND**	3.4	EPA 6010D	11-2-20	11-2-20	
Zinc	**53**	3.4	EPA 6010D	11-2-20	11-2-20	

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TOTAL METALS
EPA 6010D/6020B/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-3-14.4-15.9**					
Laboratory ID:	10-327-16					
Antimony	**ND**	3.0	EPA 6010D	11-2-20	11-2-20	
Arsenic	**3.9**	3.0	EPA 6010D	11-2-20	11-2-20	
Beryllium	**0.11**	0.060	EPA 6020B	11-4-20	11-5-20	
Cadmium	**0.078**	0.060	EPA 6020B	11-4-20	11-5-20	
Chromium	**28**	0.60	EPA 6010D	11-2-20	11-2-20	
Copper	**16**	1.2	EPA 6010D	11-2-20	11-2-20	
Lead	**1.3**	0.60	EPA 6020B	11-4-20	11-5-20	
Mercury	**0.016**	0.012	EPA 7471B	11-4-20	11-5-20	
Nickel	**24**	3.0	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	3.0	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.15	EPA 6020B	11-4-20	11-5-20	
Thallium	**ND**	3.0	EPA 6010D	11-2-20	11-2-20	
Zinc	**30**	3.0	EPA 6010D	11-2-20	11-2-20	

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TOTAL METALS
EPA 6010D/6020B/7471B
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1102SH1					
Antimony	**ND**	2.5	EPA 6010D	11-2-20	11-2-20	
Arsenic	**ND**	2.5	EPA 6010D	11-2-20	11-2-20	
Chromium	**ND**	0.50	EPA 6010D	11-2-20	11-2-20	
Copper	**ND**	1.0	EPA 6010D	11-2-20	11-2-20	
Nickel	**ND**	2.5	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	2.5	EPA 6010D	11-2-20	11-2-20	
Thallium	**ND**	2.5	EPA 6010D	11-2-20	11-2-20	
Zinc	**ND**	2.5	EPA 6010D	11-2-20	11-2-20	
Laboratory ID:	MB1104SM1					
Beryllium	**ND**	0.050	EPA 6020B	11-4-20	11-5-20	
Cadmium	**ND**	0.050	EPA 6020B	11-4-20	11-5-20	
Lead	**ND**	0.50	EPA 6020B	11-4-20	11-5-20	
Silver	**ND**	0.13	EPA 6020B	11-4-20	11-5-20	
Laboratory ID:	MB1104S1					
Mercury	**ND**	0.010	EPA 7471B	11-4-20	11-5-20	

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Project: 202005-01.01

TOTAL METALS
EPA 6010D/6020B/7471B
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-327-10										
	ORIG	DUP									
Antimony	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Arsenic	**4.07**	**4.38**	NA	NA		NA		NA	7	20	
Chromium	**25.2**	**26.1**	NA	NA		NA		NA	4	20	
Copper	**15.5**	**15.4**	NA	NA		NA		NA	1	20	
Nickel	**22.6**	**23.2**	NA	NA		NA		NA	3	20	
Selenium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Thallium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Zinc	**29.0**	**29.8**	NA	NA		NA		NA	3	20	
Laboratory ID:	10-327-10										
Beryllium	**0.134**	**0.123**	NA	NA		NA		NA	9	20	
Cadmium	**0.0755**	**0.0695**	NA	NA		NA		NA	8	20	
Lead	**1.66**	**1.40**	NA	NA		NA		NA	17	20	
Silver	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Laboratory ID:	10-327-10										
Mercury	**0.0197**	**0.0201**	NA	NA		NA		NA	2	20	
MATRIX SPIKES											
Laboratory ID:	10-327-10										
	MS	MSD	MS	MSD		MS	MSD				
Antimony	**88.5**	**88.5**	100	100	ND	**89**	**89**	75-125	0	20	
Arsenic	**99.5**	**101**	100	100	4.07	**95**	**96**	75-125	1	20	
Chromium	**121**	**122**	100	100	25.2	**96**	**97**	75-125	1	20	
Copper	**67.5**	**64.0**	50.0	50.0	15.5	**104**	**97**	75-125	5	20	
Nickel	**125**	**124**	100	100	22.6	**102**	**101**	75-125	1	20	
Selenium	**95.5**	**93.5**	100	100	ND	**96**	**94**	75-125	2	20	
Thallium	**48.2**	**51.0**	50.0	50.0	ND	**96**	**102**	75-125	6	20	
Zinc	**129**	**124**	100	100	29.0	**100**	**95**	75-125	4	20	
Laboratory ID:	10-327-10										
Beryllium	**48.9**	**47.7**	50.0	50.0	0.134	**97**	**95**	75-125	2	20	
Cadmium	**46.1**	**44.7**	50.0	50.0	0.0755	**92**	**89**	75-125	3	20	
Lead	**227**	**223**	250	250	1.66	**90**	**88**	75-125	2	20	
Silver	**20.7**	**19.9**	25.0	25.0	ND	**83**	**80**	75-125	4	20	
Laboratory ID:	10-327-10										
Mercury	**0.529**	**0.528**	0.500	0.500	0.0197	**102**	**102**	80-120	0	20	

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TCLP METALS
EPA 1311/6010D/7470A

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-5.7-9.7**					
Laboratory ID:	10-327-04					
Arsenic	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Barium	**0.47**	0.20	EPA 6010D	11-2-20	11-2-20	
Cadmium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Chromium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Lead	**ND**	0.20	EPA 6010D	11-2-20	11-2-20	
Mercury	**ND**	0.0050	EPA 7470A	10-30-20	10-30-20	
Selenium	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.040	EPA 6010D	11-2-20	11-2-20	

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TCLP METALS
EPA 1311/6010D/7470A
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1030TM1					
Arsenic	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Barium	**ND**	0.20	EPA 6010D	11-2-20	11-2-20	
Cadmium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Chromium	**ND**	0.020	EPA 6010D	11-2-20	11-2-20	
Lead	**ND**	0.20	EPA 6010D	11-2-20	11-2-20	
Selenium	**ND**	0.40	EPA 6010D	11-2-20	11-2-20	
Silver	**ND**	0.040	EPA 6010D	11-2-20	11-2-20	
Laboratory ID:	MB1030T1					
Mercury	**ND**	0.0050	EPA 7470A	10-30-20	10-30-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-279-02										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Barium	**0.462**	**0.462**	NA	NA		NA		NA	0	20	
Cadmium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Selenium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Laboratory ID:	10-279-02										
Mercury	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-279-02										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**3.92**	**3.90**	4.00	4.00	ND	**98**	**98**	75-125	1	20	
Barium	**4.29**	**4.30**	4.00	4.00	0.462	**96**	**96**	75-125	0	20	
Cadmium	**1.82**	**1.81**	2.00	2.00	ND	**91**	**90**	75-125	1	20	
Chromium	**3.80**	**3.78**	4.00	4.00	ND	**95**	**95**	75-125	1	20	
Lead	**9.55**	**9.51**	10.0	10.0	ND	**96**	**95**	75-125	0	20	
Selenium	**4.05**	**4.01**	4.00	4.00	ND	**101**	**100**	75-125	1	20	
Silver	**0.960**	**0.968**	1.00	1.00	ND	**96**	**97**	75-125	1	20	
Laboratory ID:	10-279-02										
Mercury	**0.0488**	**0.0486**	0.0500	0.0500	ND	**98**	**97**	75-125	0	20	

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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-6-GW**					
Laboratory ID:	10-327-12					
Antimony	**ND**	1.0	EPA 200.8		11-5-20	
Arsenic	**0.76**	0.50	EPA 200.8		11-5-20	
Beryllium	**ND**	0.20	EPA 200.8		11-5-20	
Cadmium	**ND**	0.20	EPA 200.8		11-5-20	
Chromium	**ND**	1.0	EPA 200.8		11-5-20	
Copper	**ND**	1.0	EPA 200.8		11-5-20	
Lead	**ND**	0.50	EPA 200.8		11-5-20	
Mercury	**ND**	0.025	EPA 7470A		11-5-20	
Nickel	**17**	1.0	EPA 200.8		11-5-20	
Selenium	**5.6**	1.0	EPA 200.8		11-5-20	
Silver	**ND**	0.20	EPA 200.8		11-5-20	
Thallium	**ND**	0.20	EPA 200.8		11-5-20	
Zinc	**3.0**	2.5	EPA 200.8		11-5-20	
Client ID:	**GP-3-GW**					
Laboratory ID:	10-327-17					
Antimony	**ND**	1.0	EPA 200.8		11-5-20	
Arsenic	**0.68**	0.50	EPA 200.8		11-5-20	
Beryllium	**ND**	0.20	EPA 200.8		11-5-20	
Cadmium	**ND**	0.20	EPA 200.8		11-5-20	
Chromium	**ND**	1.0	EPA 200.8		11-5-20	
Copper	**ND**	1.0	EPA 200.8		11-5-20	
Lead	**ND**	0.50	EPA 200.8		11-5-20	
Mercury	**ND**	0.025	EPA 7470A		11-5-20	
Nickel	**13**	1.0	EPA 200.8		11-5-20	
Selenium	**1.4**	1.0	EPA 200.8		11-5-20	
Silver	**ND**	0.20	EPA 200.8		11-5-20	
Thallium	**ND**	0.20	EPA 200.8		11-5-20	
Zinc	**7.0**	2.5	EPA 200.8		11-5-20	

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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-3-GW-Dup**					
Laboratory ID:	10-327-18					
Antimony	**ND**	1.0	EPA 200.8		11-5-20	
Arsenic	**0.56**	0.50	EPA 200.8		11-5-20	
Beryllium	**ND**	0.20	EPA 200.8		11-5-20	
Cadmium	**ND**	0.20	EPA 200.8		11-5-20	
Chromium	**ND**	1.0	EPA 200.8		11-5-20	
Copper	**ND**	1.0	EPA 200.8		11-5-20	
Lead	**ND**	0.50	EPA 200.8		11-5-20	
Mercury	**ND**	0.025	EPA 7470A		11-5-20	
Nickel	**15**	1.0	EPA 200.8		11-5-20	
Selenium	**1.4**	1.0	EPA 200.8		11-5-20	
Silver	**ND**	0.20	EPA 200.8		11-5-20	
Thallium	**ND**	0.20	EPA 200.8		11-5-20	
Zinc	**6.6**	2.5	EPA 200.8		11-5-20	

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DISSOLVED METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1105D1					
Antimony	**ND**	1.0	EPA 200.8		11-5-20	
Arsenic	**ND**	0.50	EPA 200.8		11-5-20	
Beryllium	**ND**	0.20	EPA 200.8		11-5-20	
Cadmium	**ND**	0.20	EPA 200.8		11-5-20	
Chromium	**ND**	1.0	EPA 200.8		11-5-20	
Copper	**ND**	1.0	EPA 200.8		11-5-20	
Lead	**ND**	0.50	EPA 200.8		11-5-20	
Nickel	**ND**	0.50	EPA 200.8		11-5-20	
Selenium	**ND**	1.0	EPA 200.8		11-5-20	
Silver	**ND**	0.20	EPA 200.8		11-5-20	
Thallium	**ND**	0.20	EPA 200.8		11-5-20	
Zinc	**ND**	2.5	EPA 200.8		11-5-20	
Laboratory ID:	MB1105D1					
Mercury	**ND**	0.025	EPA 7470A		11-5-20	

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DISSOLVED METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	10-327-17									
	ORIG	DUP								
Antimony	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Arsenic	**0.680**	**0.702**	NA	NA		NA	NA	3	20	
Beryllium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Cadmium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Copper	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Nickel	**12.8**	**13.3**	NA	NA		NA	NA	4	20	
Selenium	**1.37**	**1.34**	NA	NA		NA	NA	2	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Thallium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Zinc	**7.02**	**6.84**	NA	NA		NA	NA	3	20	
Laboratory ID:	10-327-17									
Mercury	**ND**	**ND**	NA	NA		NA	NA	NA	20	
MATRIX SPIKES										
Laboratory ID:	10-327-17									
	MS	MSD	MS	MSD		MS	MSD			
Antimony	**84.0**	**84.8**	80.0	80.0	ND	**105**	**106**	75-125	1	20
Arsenic	**86.0**	**84.4**	80.0	80.0	0.680	**107**	**105**	75-125	2	20
Beryllium	**77.2**	**77.6**	80.0	80.0	ND	**97**	**97**	75-125	1	20
Cadmium	**77.0**	**78.0**	80.0	80.0	ND	**96**	**98**	75-125	1	20
Chromium	**76.6**	**75.4**	80.0	80.0	ND	**96**	**94**	75-125	2	20
Copper	**71.6**	**72.0**	80.0	80.0	ND	**90**	**90**	75-125	1	20
Lead	**74.8**	**75.2**	80.0	80.0	ND	**94**	**94**	75-125	1	20
Nickel	**87.0**	**86.6**	80.0	80.0	12.8	**93**	**92**	75-125	0	20
Selenium	**96.4**	**94.8**	80.0	80.0	1.37	**119**	**117**	75-125	2	20
Silver	**69.4**	**68.0**	80.0	80.0	ND	**87**	**85**	75-125	2	20
Thallium	**74.4**	**75.8**	80.0	80.0	ND	**93**	**95**	75-125	2	20
Zinc	**83.2**	**81.0**	80.0	80.0	7.02	**95**	**93**	75-125	3	20
Laboratory ID:	10-327-17									
Mercury	**5.78**	**5.78**	6.25	6.25	ND	**92**	**92**	75-125	0	20

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

TOTAL SOLIDS
SM 2540G

Matrix: Soil
Units: % Solids

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-2-8-9**					
Laboratory ID:	10-327-01					
Total Solids	**75**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**GP-2-25-27**					
Laboratory ID:	10-327-03					
Total Solids	**76**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**GP-1-5.7-9.7**					
Laboratory ID:	10-327-04					
Total Solids	**78**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**GP-1-20-22**					
Laboratory ID:	10-327-06					
Total Solids	**73**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**GP-1-20-22-Dup**					
Laboratory ID:	10-327-07					
Total Solids	**71**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**GP-5-6.9-7.5**					
Laboratory ID:	10-327-08					
Total Solids	**79**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**GP-5-20-22**					
Laboratory ID:	10-327-10					
Total Solids	**81**	0.50	SM 2540G	10-29-20	10-30-20	

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

TOTAL SOLIDS
SM 2540G

Matrix: Soil
Units: % Solids

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-6-10.8-15**					
Laboratory ID:	10-327-11					
Total Solids	**80**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**GP-4-7.8-8.7**					
Laboratory ID:	10-327-13					
Total Solids	**66**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**GP-4-15-18.7**					
Laboratory ID:	10-327-14					
Total Solids	**73**	0.50	SM 2540G	10-29-20	10-30-20	
Client ID:	**GP-3-14.4-15.9**					
Laboratory ID:	10-327-16					
Total Solids	**83**	0.50	SM 2540G	10-29-20	10-30-20	

Date of Report: November 17, 2020
Samples Submitted: October 28, 2020
Laboratory Reference: 2010-327
Project: 202005-01.01

TOTAL SOLIDS
SM 2540G
QUALITY CONTROL

Matrix: Soil
Units: % Solids

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	10-264-01								
	ORIG	DUP							
Total Solids	**89.3**	**91.7**	NA	NA	NA	NA	3	20	
Laboratory ID:	10-327-10								
	ORIG	DUP							
Total Solids	**81.1**	**81.2**	NA	NA	NA	NA	0	20	

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

November 17, 2020

Vista Work Order No. 2002347

Mr. David Baumeister
OnSite Environmental Inc.
14648 NE 95th Street
Redmond, WA 98052

Dear Mr. Baumeister,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on October 30, 2020 under your Project Name '202005-01.01'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier
Laboratory Director

Vista Work Order No. 2002347
Case Narrative

Sample Condition on Receipt:

One solid sample was received and stored securely in accordance with Vista standard operating procedures and EPA methodology. The sample was received in good condition and within the method temperature requirements. The sample was received in a clear glass jar.

Analytical Notes:

EPA Method 1613B

This sample was extracted and analyzed for tetra-through-octa chlorinated dioxins and furans by EPA Method 1613B using a ZB-DIOXIN GC column.

Holding Times

The sample was extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank. The OPR recoveries were within the method acceptance criteria.

Labeled standard recoveries for all QC and field samples were within method acceptance criteria.

TABLE OF CONTENTS

Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2002347-01	GP-1-5.7-9.7	26-Oct-20 13:15	30-Oct-20 07:49	Clear Glass Jar, 250mL

ANALYTICAL RESULTS

Sample ID: Method Blank — EPA Method 1613B

Client Data

Name: OnSite Environmental Inc.
Project: 202005-01.01
Matrix: Solid

Laboratory Data

Lab Sample: B0K0041-BLK1
QC Batch: B0K0041 Date Extracted: 05-Nov-20
Sample Size: 10.0 g Column: ZB-DIOXIN

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.0263			13-Nov-20 10:55	1
1,2,3,7,8-PeCDD	ND	0.0497			13-Nov-20 10:55	1
1,2,3,4,7,8-HxCDD	ND	0.0568			13-Nov-20 10:55	1
1,2,3,6,7,8-HxCDD	ND	0.0574			13-Nov-20 10:55	1
1,2,3,7,8,9-HxCDD	ND	0.0721			13-Nov-20 10:55	1
1,2,3,4,6,7,8-HpCDD	ND	0.0573			13-Nov-20 10:55	1
OCDD	ND	0.116			13-Nov-20 10:55	1
2,3,7,8-TCDF	ND	0.0198			13-Nov-20 10:55	1
1,2,3,7,8-PeCDF	ND	0.0288			13-Nov-20 10:55	1
2,3,4,7,8-PeCDF	ND	0.0235			13-Nov-20 10:55	1
1,2,3,4,7,8-HxCDF	ND	0.0329			13-Nov-20 10:55	1
1,2,3,6,7,8-HxCDF	ND	0.0337			13-Nov-20 10:55	1
2,3,4,6,7,8-HxCDF	ND	0.0389			13-Nov-20 10:55	1
1,2,3,7,8,9-HxCDF	ND	0.0698			13-Nov-20 10:55	1
1,2,3,4,6,7,8-HpCDF	ND	0.0487			13-Nov-20 10:55	1
1,2,3,4,7,8,9-HpCDF	ND	0.0568			13-Nov-20 10:55	1
OCDF	ND	0.0915			13-Nov-20 10:55	1
Toxic Equivalent						
TEQMinWHO2005Dioxin	0.00					
Totals						
Total TCDD	ND	0.0263				
Total PeCDD	ND	0.0497				
Total HxCDD	ND	0.0721				
Total HpCDD	ND	0.0573				
Total TCDF	ND	0.0198				
Total PeCDF	ND	0.0288				
Total HxCDF	ND	0.0698				
Total HpCDF	ND	0.0568				

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	80.4	25 - 164		13-Nov-20 10:55	1
13C-1,2,3,7,8-PeCDD	IS	81.8	25 - 181		13-Nov-20 10:55	1
13C-1,2,3,4,7,8-HxCDD	IS	88.4	32 - 141		13-Nov-20 10:55	1
13C-1,2,3,6,7,8-HxCDD	IS	89.3	28 - 130		13-Nov-20 10:55	1
13C-1,2,3,7,8,9-HxCDD	IS	80.0	32 - 141		13-Nov-20 10:55	1
13C-1,2,3,4,6,7,8-HpCDD	IS	80.0	23 - 140		13-Nov-20 10:55	1
13C-OCDD	IS	74.4	17 - 157		13-Nov-20 10:55	1
13C-2,3,7,8-TCDF	IS	83.2	24 - 169		13-Nov-20 10:55	1
13C-1,2,3,7,8-PeCDF	IS	84.6	24 - 185		13-Nov-20 10:55	1
13C-2,3,4,7,8-PeCDF	IS	90.3	21 - 178		13-Nov-20 10:55	1
13C-1,2,3,4,7,8-HxCDF	IS	82.0	26 - 152		13-Nov-20 10:55	1
13C-1,2,3,6,7,8-HxCDF	IS	82.7	26 - 123		13-Nov-20 10:55	1
13C-2,3,4,6,7,8-HxCDF	IS	83.8	28 - 136		13-Nov-20 10:55	1
13C-1,2,3,7,8,9-HxCDF	IS	71.1	29 - 147		13-Nov-20 10:55	1
13C-1,2,3,4,6,7,8-HpCDF	IS	75.5	28 - 143		13-Nov-20 10:55	1
13C-1,2,3,4,7,8,9-HpCDF	IS	71.1	26 - 138		13-Nov-20 10:55	1
13C-OCDF	IS	71.5	17 - 157		13-Nov-20 10:55	1
37Cl-2,3,7,8-TCDD	CRS	95.5	35 - 197		13-Nov-20 10:55	1

EDL - Sample specifc estimated detection limit
EMPC - Estimated maximum possible concentration

The results are reported in dry weight.
The sample size is reported in wet weight.

Sample ID: OPR **EPA Method 1613B**

Client Data
Name: OnSite Environmental Inc.
Project: 202005-01.01
Matrix: Solid

Laboratory Data
Lab Sample: B0K0041-BS1
QC Batch: B0K0041 Date Extracted: 05-Nov-20 06:05
Sample Size: 10.0 g Column: ZB-DIOXIN

Analyte	Amt Found (pg/g)	Spike Amt	% Recovery	Limits	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	21.0	20.0	105	67-158		13-Nov-20 09:25	1
1,2,3,7,8-PeCDD	106	100	106	70-142		13-Nov-20 09:25	1
1,2,3,4,7,8-HxCDD	101	100	101	70-164		13-Nov-20 09:25	1
1,2,3,6,7,8-HxCDD	104	100	104	76-134		13-Nov-20 09:25	1
1,2,3,7,8,9-HxCDD	103	100	103	64-162		13-Nov-20 09:25	1
1,2,3,4,6,7,8-HpCDD	102	100	102	70-140		13-Nov-20 09:25	1
OCDD	204	200	102	78-144		13-Nov-20 09:25	1
2,3,7,8-TCDF	19.4	20.0	96.8	75-158		13-Nov-20 09:25	1
1,2,3,7,8-PeCDF	102	100	102	80-134		13-Nov-20 09:25	1
2,3,4,7,8-PeCDF	102	100	102	68-160		13-Nov-20 09:25	1
1,2,3,4,7,8-HxCDF	103	100	103	72-134		13-Nov-20 09:25	1
1,2,3,6,7,8-HxCDF	101	100	101	84-130		13-Nov-20 09:25	1
2,3,4,6,7,8-HxCDF	100	100	100	70-156		13-Nov-20 09:25	1
1,2,3,7,8,9-HxCDF	98.9	100	98.9	78-130		13-Nov-20 09:25	1
1,2,3,4,6,7,8-HpCDF	103	100	103	82-122		13-Nov-20 09:25	1
1,2,3,4,7,8,9-HpCDF	100	100	100	78-138		13-Nov-20 09:25	1
OCDF	200	200	100	63-170		13-Nov-20 09:25	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	88.5	20-175		13-Nov-20 09:25	1
13C-1,2,3,7,8-PeCDD	IS	89.5	21-227		13-Nov-20 09:25	1
13C-1,2,3,4,7,8-HxCDD	IS	91.6	21-193		13-Nov-20 09:25	1
13C-1,2,3,6,7,8-HxCDD	IS	91.8	25-163		13-Nov-20 09:25	1
13C-1,2,3,7,8,9-HxCDD	IS	90.8	21-193		13-Nov-20 09:25	1
13C-1,2,3,4,6,7,8-HpCDD	IS	87.0	26-166		13-Nov-20 09:25	1
13C-OCDD	IS	79.6	13-199		13-Nov-20 09:25	1
13C-2,3,7,8-TCDF	IS	88.7	22-152		13-Nov-20 09:25	1
13C-1,2,3,7,8-PeCDF	IS	93.6	21-192		13-Nov-20 09:25	1
13C-2,3,4,7,8-PeCDF	IS	95.6	13-328		13-Nov-20 09:25	1
13C-1,2,3,4,7,8-HxCDF	IS	84.0	19-202		13-Nov-20 09:25	1
13C-1,2,3,6,7,8-HxCDF	IS	85.3	21-159		13-Nov-20 09:25	1
13C-2,3,4,6,7,8-HxCDF	IS	85.0	22-176		13-Nov-20 09:25	1
13C-1,2,3,7,8,9-HxCDF	IS	87.1	17-205		13-Nov-20 09:25	1
13C-1,2,3,4,6,7,8-HpCDF	IS	78.0	21-158		13-Nov-20 09:25	1
13C-1,2,3,4,7,8,9-HpCDF	IS	75.8	20-186		13-Nov-20 09:25	1
13C-OCDF	IS	77.7	13-199		13-Nov-20 09:25	1
37Cl-2,3,7,8-TCDD	CRS	106	31-191		13-Nov-20 09:25	1

Sample ID: GP-1-5.7-9.7 **EPA Method 1613B**

Client Data

Name: OnSite Environmental Inc.
Project: 202005-01.01
Matrix: Solid
Date Collected: 26-Oct-20 13:15

Laboratory Data

Lab Sample: 2002347-01
QC Batch: B0K0041
Sample Size: 12.9 g
% Solids: 77.8
Date Received: 30-Oct-20 07:49
Date Extracted: 05-Nov-20
Column: ZB-DIOXIN

Analyte	Conc. (pg/g)	EDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.0323			14-Nov-20 06:31	1
1,2,3,7,8-PeCDD	ND	0.0816			14-Nov-20 06:31	1
1,2,3,4,7,8-HxCDD	ND	0.140			14-Nov-20 06:31	1
1,2,3,6,7,8-HxCDD	ND	0.147			14-Nov-20 06:31	1
1,2,3,7,8,9-HxCDD	ND	0.165			14-Nov-20 06:31	1
1,2,3,4,6,7,8-HpCDD	2.60				14-Nov-20 06:31	1
OCDD	34.6				14-Nov-20 06:31	1
2,3,7,8-TCDF	ND	0.0247			14-Nov-20 06:31	1
1,2,3,7,8-PeCDF	ND	0.0301			14-Nov-20 06:31	1
2,3,4,7,8-PeCDF	ND	0.0256			14-Nov-20 06:31	1
1,2,3,4,7,8-HxCDF	ND	0.0403			14-Nov-20 06:31	1
1,2,3,6,7,8-HxCDF	ND	0.0387			14-Nov-20 06:31	1
2,3,4,6,7,8-HxCDF	ND	0.0418			14-Nov-20 06:31	1
1,2,3,7,8,9-HxCDF	ND	0.0675			14-Nov-20 06:31	1
1,2,3,4,6,7,8-HpCDF	ND	0.0849			14-Nov-20 06:31	1
1,2,3,4,7,8,9-HpCDF	ND	0.0805			14-Nov-20 06:31	1
OCDF	ND	0.101			14-Nov-20 06:31	1
Toxic Equivalent						
TEQMinWHO2005Dioxin	0.0364					
Totals						
Total TCDD	0.134					
Total PeCDD	0.194					
Total HxCDD	0.947		1.38			
Total HpCDD	6.48					
Total TCDF	0.0999					
Total PeCDF	ND	0.0301				
Total HxCDF	ND	0.0675				
Total HpCDF	ND	0.0849				

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	94.5	25 - 164		14-Nov-20 06:31	1
13C-1,2,3,7,8-PeCDD	IS	94.1	25 - 181		14-Nov-20 06:31	1
13C-1,2,3,4,7,8-HxCDD	IS	93.6	32 - 141		14-Nov-20 06:31	1
13C-1,2,3,6,7,8-HxCDD	IS	94.5	28 - 130		14-Nov-20 06:31	1
13C-1,2,3,7,8,9-HxCDD	IS	95.3	32 - 141		14-Nov-20 06:31	1
13C-1,2,3,4,6,7,8-HpCDD	IS	91.5	23 - 140		14-Nov-20 06:31	1
13C-OCDD	IS	88.0	17 - 157		14-Nov-20 06:31	1
13C-2,3,7,8-TCDF	IS	97.2	24 - 169		14-Nov-20 06:31	1
13C-1,2,3,7,8-PeCDF	IS	99.6	24 - 185		14-Nov-20 06:31	1
13C-2,3,4,7,8-PeCDF	IS	100	21 - 178		14-Nov-20 06:31	1
13C-1,2,3,4,7,8-HxCDF	IS	89.4	26 - 152		14-Nov-20 06:31	1
13C-1,2,3,6,7,8-HxCDF	IS	91.2	26 - 123		14-Nov-20 06:31	1
13C-2,3,4,6,7,8-HxCDF	IS	93.5	28 - 136		14-Nov-20 06:31	1
13C-1,2,3,7,8,9-HxCDF	IS	93.2	29 - 147		14-Nov-20 06:31	1
13C-1,2,3,4,6,7,8-HpCDF	IS	86.8	28 - 143		14-Nov-20 06:31	1
13C-1,2,3,4,7,8,9-HpCDF	IS	89.8	26 - 138		14-Nov-20 06:31	1
13C-OCDF	IS	86.3	17 - 157		14-Nov-20 06:31	1
37Cl-2,3,7,8-TCDD	CRS	105	35 - 197		14-Nov-20 06:31	1

EDL - Sample specifc estimated detection limit
EMPC - Estimated maximum possible concentration

The results are reported in dry weight.
The sample size is reported in wet weight.

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
CRS	Cleanup Recovery Standard
D	Dilution
DL	Detection Limit
E	The associated compound concentration exceeded the calibration range of the instrument
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
IS	Internal Standard
J	The amount detected is below the Reporting Limit/LOQ
K	EMPC (specific projects only)
LOD	Limit of Detection
LOQ	Limit of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
MDL	Method Detection Limit
NA	Not applicable
ND	Not Detected
OPR	Ongoing Precision and Recovery sample
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
RL	Reporting Limit
TEQ	Toxic Equivalency
U	Not Detected (specific projects only)

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

Vista Analytical Laboratory Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	19-013-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-23
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2018017
Massachusetts Department of Environmental Protection	N/A
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	1521520
New Hampshire Environmental Accreditation Program	207718-B
New Jersey Department of Environmental Protection	190001
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-010
Pennsylvania Department of Environmental Protection	016
Texas Commission on Environmental Quality	T104704189-19-10
Vermont Department of Health	VT-4042
Virginia Department of General Services	10272
Washington Department of Ecology	C584-19
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	**Method**
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA TO-9A

MATRIX: Biological Tissue	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	**Method**
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613/1613B
1,4-Dioxane (1,4-Diethyleneoxide) analysis by GC/HRMS	EPA 522
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	ISO 25101 2009

MATRIX: Non-Potable Water	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	**Method**
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

2.3°C 2002347

OnSite Environmental Inc.

14648 NE 95th Street, Redmond, WA 98052 · (425) 883-3881

Laboratory Reference #: 10-327

Laboratory: Vista Analytical Laboratory

Turnaround Request

Project Manager: David Baumeister

Attention: Jennifer Miller

1 Day 2 Day 3 Day

email: dbaumeister@onsite-env.com

Address: 1104 Windfield Way, El Dorado Hills, CA 95762

Standard

Project Number: 202005-01.01

Phone Number: (916) 673-1520

Other: _____

Project Name: _____

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	Requested Analyses
	GP-1-5.7-9.7	10/26/20	13:15	S	1	Dioxins/Furans

Signature	Company	Date	Time	Comments/Special Instructions
Relinquished by: [signature]	OSE	10/29/20	1600	EDDs
Received by: [signature]	VAL	10/30/20	07:49	
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Vista Analytical Laboratory

Sample Log-In Checklist

Page # 1 of 1

Vista Work Order #: 2002347 TAT Std

Samples Arrival:	**Date/Time** 10/30/20 7:49		**Initials:** URW		**Location:** WR-2 **Shelf/Rack:** A/A		
Delivered By:	FedEx	UPS	On Trac	GLS	DHL	Hand Delivered	Other
Preservation:	Ice		Blue Ice		Techni Ice	Dry Ice	None
Temp °C: 2.3 (uncorrected) **Temp °C:** 2.3 (corrected)	**Probe used:** Y / N				**Thermometer ID:** IR-4		

	YES	NO	NA
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?			X
Airbill — Trk # 1Z684E1W1595788339	✓		
Shipping Documentation Present?	✓		
Shipping Container: Vista / Client / Retain / Return / Dispose			
Chain of Custody / Sample Documentation Present?	✓		
Chain of Custody / Sample Documentation Complete?	✓		
Holding Time Acceptable?	✓		

Logged In:	**Date/Time** 11/02/20 0909	**Initials:** KS	**Location:** WR-2 **Shelf/Rack:** F-3
COC Anomaly/Sample Acceptance Form completed?	✓		

Comments:

CoC/Label Reconciliation Report WO# 2002347

LabNumber	CoC Sample ID	SampleAlias	Sample Date/Time	Container	BaseMatrix	Sample Comments
2002347-01	A GP-1-5.7-9.7 ☑		26-Oct-20 13:15 ☑	Clear Glass Jar, 250mL	Solid	

Checkmarks indicate that information on the COC reconciled with the sample label.
Any discrepancies are noted in the following columns.

	Yes	No	NA
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Adequate Sample Volume?	✓		
Container Type Appropriate for Analysis(es)		✓	
Preservation Documented: Na2S2O3 Trizma (None) Other		✓	✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Comments:
* Reconciled with container lid

Verifed by/Date: KS 11/02/20

Vista Analytical Laboratory

ANOMALY FORM

Vista Work Order 2002347

Initial/Date — The following checked issues were noted during sample receipt and login:

_____ ☐ **1. The samples were received out of temperature at (WI-PHT):** _____
Was Ice present: Yes No Melted Blue Ice

_____ ☐ 2. The Chain-of-Custody (CoC) was not relinquished properly.

_____ ☐ 3. The CoC did not include collection time(s). 00:00 will be used unless notified otherwise.

_____ ☐ 4. The sample(s) did not include a sample collection time. All or Sample Name: _____

_____ ☐ 5. A sample ID discrepancy was found. See the Reconciliation report.
The CoC Sample ID will be used unless notified otherwise.

_____ ☐ 6. A sample date and/or time discrepancy was found. See the Reconciliation report.
The CoC Sample date/time will be used unless notified otherwise.

_____ ☐ **7. The CoC did not include a sample matrix. The following sample matrix will be used:** _____

_____ ☐ **8. Insufficent volume received for analysis. All or Sample Name:** _____

_____ ☐ 9. The backup bottle was received broken. Sample Name: _____

_____ ☐ **10. CoC not received, illegible or destroyed.**

_____ ☐ **11. The sample(s) were received out of holding time. All or Sample Name:** _____

_____ ☐ **12. The CoC did not include an analysis. All or Sample Name:** _____

_____ ☐ **13. Sample(s) received without collection date. All or Sample Name:** _____

_____ ☐ **14. Sample(s) not received. All or Sample Name:** _____

_____ ☐ **15. Sample(s) received broken. All or Sample Name:** _____

KS 11/6/20 ☑ **16. An incorrect container-type was used. All or Sample Name:** All

_____ ☐ 17. Other:

Bolded items require sign-off

Client Contacted: Yes, via email

Date of Contact: 11/02/2020

Vista Client Manager: KJR

Resolution: Client contacted in body of acknowledgement letter.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Anchor QEA
Project Number: 202005-01.01
Project Name: ABC Recycling
Project Manager: Derek Ormerod
Sampled by: MH / DP

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 10-327

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~HFOA~~ Metals (6010C/7471A) PP metals	TCLP Metals	HEM (oil and grease) 1664A	Dioxin/furans	MS/MSD		HOLD	% Moisture 2540G TOTAL SOLIDS
1	GP-2-8-9	10.26.20	1030	Soil	3			X	X					X	X					X			X				X
2	GP-2-14-20		1045		3			X	X					X	X					X			X			X	X
3	GP-2-25.27		1050		3			X	X					X	X					X			X				X
4	GP-1-~~10-12.3~~ 5.7-9.7		1315		3			X	X					X	X					X			X				X
5	GP-1-10.12.3		1320		3			X	X					X	X					X			X			X	X
6	GP-1-20-22		1330		3			X	X					X	X					X			X				X
7	GP-1-20-22-Dup		1331		3			X	X					X	X					X			X				X
8	GP-5-6.9-7.5		1515		3			X	X					X	X					X			X				X
9	GP-5-10-11		1535		3			X	X					X	X					X			X			X	X
10	GP-5-20-22		1530		3			X	X					X	X					X			X	X			X

	Signature	Company	Date	Time
Relinquished		Anchor QEA	10/28/20	0820
Received		Speedy	10-28-20	0820
Relinquished		Speedy	10-28-20	0855
Received			10/28/20	0855
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Sb, As, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Th, Zn
X-HOLD
~~Hold all samples pending further instructions.~~
☒ Added 10/28/2020. DB( )

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Anchor QEA
Project Number: 202005-01.01
Project Name: ABC Recycling
Project Manager: Develz Ormerod
Sampled by: MH/DP

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 10-327

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~MTCA~~ Metals (6 CDEC/7471A) PP Metals	TCLP Metals	HEM (oil and grease) 1664A	Dioxin/Furans	Diss. Metals (6010C/7470A) (PP metals)	MS/MSD	HOLD	%~~Moisture~~ 2540G TOTAL SOLIDS
11	GP-6-10.8-15	10.26.20	1650	Soil	3			X	X					X	X					X			X				X
12	GP-6-GW	↓	1750	GW	11			X	X					X	X								X	X			
13	GP-4-7.8-8.7	10.27.20	1020	Soil	3			X	X					X	X					X			X				X
14	GP-4-15-18.7	↓	1030	↓	3			X	X					X	X					X			X				X
15	GP-3-12.7-13.4		1205		3			X	X					X	X					X			X			X	X
16	GP-3-14.4-15.9		1215		3			X	X					X	X					X			X				X
17	GP-3-GW		1315	GW	23			X	X					X	X					*			X	X	X		
18	GP-3-GW-Dup	↓	1320	↓	11			X	X					X	X					*			X	X			
19	TB-201026	10.26.20	1015	W	2			X																			

* 2P

	Signature	Company	Date	Time
Relinquished		Anchor QEA	10/28/20	0820
Received		Speedy	10-28-20	0820
Relinquished		Speedy	10-28-20	0855
Received			10/28/20	0855
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

Sample/Cooler Receipt and Acceptance Checklist

Client: ANC

Client Project Name/Number: 202005-01.01

OnSite Project Number: 10-327

Initiated by: MV

Date Initiated: 10/28/20

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	(Yes)	No	N/A	1 2 3 4	
1.2 Were the custody seals intact?	(Yes)	No	N/A	1 2 3 4	
1.3 Were the custody seals signed and dated by last custodian?	(Yes)	No	N/A	1 2 3 4	
1.4 Were the samples delivered on ice or blue ice?	(Yes)	No	N/A	1 2 3 4	
1.5 Were samples received between 0-6 degrees Celsius?	(Yes)	No	N/A	Temperature:	2,3,3,4
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	(N/A)			
1.7 How were the samples delivered?	Client	(Courier)	UPS/FedEx	OSE Pickup	Other

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	(Yes)	No		1 2 3 4
2.2 Was the COC legible and written in permanent ink?	(Yes)	No		1 2 3 4
2.3 Have samples been relinquished and accepted by each custodian?	(Yes)	No		1 2 3 4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	(Yes)	No		1 2 3 4
2.5 Were all of the samples listed on the COC submitted?	(Yes)	No		1 2 3 4
2.6 Were any of the samples submitted omitted from the COC?	Yes	(No)		1 2 3 4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	(No)		1 2 3 4
3.2 Were any sample labels missing or illegible?	Yes	(No)		1 2 3 4
3.3 Have the correct containers been used for each analysis requested?	(Yes)	No		1 2 3 4
3.4 Have the samples been correctly preserved?	Yes	(No)	N/A	1 2 3 4
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	(Yes)	No	N/A	1 2 3 4
3.6 Is there sufficient sample submitted to perform requested analyses?	(Yes)	No		1 2 3 4
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	(No)		1 2 3 4
3.8 Was method 5035A used?	(Yes)	No	N/A	1 2 3 4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#	2	N/A	1 2 3 4

Explain any discrepancies:

3.4) 1/2L ambers unpreserved

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed